

**SEVENTY-FOURTH**  
**ANNUAL MEETING**  
**OF THE**  
**AMERICAN INSTITUTE OF INSTRUCTION**  
**BETHLEHEM, N. H.**

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**PROCEEDINGS, CONSTITUTION,  
LIST OF ACTIVE MEMBERS, AND  
ABSTRACTS OF ADDRESSES**

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**PUBLISHED BY ORDER OF THE  
BOARD OF DIRECTORS**

**WILLIAM B. EATON**

**BOSTON, MASS.**

**AMERICAN INSTITUTE OF INSTRUCTION**  
**1904**

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## EXECUTIVE OFFICERS.

### *President.*

CHARLES H. KEYES,  
82 Wethersfield Avenue, Hartford, Conn.

### *Secretary.*

WM. C. CRAWFORD,  
80 Ashford Street, Allston District, Boston, Mass.

### *Assistant Secretary.*

PAYSON SMITH,  
Auburn, Maine.

### *Treasurer.*

ALVIN F. PEASE,  
3 Kneeland Street, Malden, Mass.

### *Assistant Treasurer.*

NATHAN L. BISHOP  
Norwich, Conn.

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# **American Institute of Instruction.**

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## **Seventy-Fourth Annual Meeting**

**Bethlehem, N. H., July 5, 6, 7, and 8, 1904.**

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### **LITERARY PROCEEDINGS.**

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#### **GENERAL SESSIONS.**

*Tuesday Evening, July 5.—Cruft Hall.*

**8.00 O'CLOCK.**

**ADDRESS OF WELCOME:** His Excellency Gov. Nahum J. Bachelder, of New Hampshire.

**RESPONSES:** State Superintendent W. W. Stetson, of Maine, and Dr. A. E. Winship, of Boston, Mass.

**SOLO:** Miss Gertrude Laidlaw, Hartford, Conn.

**PRESIDENT'S ADDRESS:** **PHYSICAL EQUIPMENT FOR A LIFE OF SERVICE:** Charles H. Keyes, Supt. South District, Hartford, Conn.

**EDUCATION FOR LEADERSHIP:** Walter Ballou Jacobs, Brown University, Providence, R. I.

**SOLO:** Miss Laidlaw.

*Wednesday Morning, July 6.—Cruft Hall.*

9 O'CLOCK.

DEVOTIONAL EXERCISES: Led by Rev. William Ramsden, of the Bethlehem Methodist Church.

ORGANIZATION OF EDUCATIONAL EXPERIENCE: Paul H. Hanus, Professor of Education, Harvard University.

MUSIC.

THE WOMAN'S CLUB AS A FORCE IN EDUCATIONAL PROGRESS: Mrs. Mary I. Wood, President of the New Hampshire Federation of Woman's Clubs.

ATHLETICS AND ETHICS: Alfred E. Stearns, Head Master of Phillips Academy, Andover.

ETHICAL ELEMENTS IN EDUCATION: E. Hershey Sneath, Professor of Philosophy, Yale University.

*Wednesday Evening.—Casino.*

8.00 O'CLOCK.

MUSIC: Miss Gertrude Laidlaw.

NEW ENGLAND WRITERS, PAST AND PRESENT: Dr. A. E. Winship, *New England Journal of Education*, Boston.

THE FAIRY GODMOTHER'S STORY: Miss Marie Shedlock, London, England.

SOCIAL AND RECEPTION.

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*Thursday Morning, July 7.—Cruft Hall.*

9.00 O'CLOCK.

DEVOTIONAL EXERCISES.

MUSIC.

THE KINDERGARTEN PROBLEM IN NEW ENGLAND:  
Giles A. Stuart, Supt. of Schools, New Britain,  
Conn.

PROBLEMS AND SOLUTIONS: Hon. Channing Folsom,  
State Supt. Pub. Instruction, Concord, N. H.

ENGLISH IN THE COMMON SCHOOLS: H. K. Whit-  
taker, Principal High School, Brattleboro, Vt.

LITERATURE IN ELEMENTARY SCHOOLS: Bertha M.  
McConkey, Supt. Primary Schools, Springfield,  
Mass.

*Thursday Evening.—Cruft Hall.*

8.00 O'CLOCK.

MEASURE OF A TEACHER'S EFFICIENCY: Dr. Edwin P.  
Seaver, Superintendent of Schools, Boston, Mass.  
MUSIC.

TWO FACTORS IN SOCIAL PROGRESS: Hon. George H.  
Martin, Sec'y State Board of Education, Boston,

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*Friday Morning, July 8.—Cruft Hall.*

9.00 O'CLOCK.

DEVOTIONAL EXERCISES.

MUSIC.

IDEALISM IN THE SCHOOLROOM: Hon. Fred Gowing,  
Boston, Mass.

ARITHMETIC A MISUSED AGENT IN EDUCATION:  
Louis P. Nash, Superintendent of Schools, Holy-  
oke, Mass.

THE ART OF STORY-TELLING: Miss Marie Shedlock,  
London, England.

*Friday Evening.—Casino.*

8.00 O'CLOCK.

**MUSIC.**

**ECONOMY IN EDUCATION:** William J. Tucker, President of Dartmouth College, Hanover, N. H.

**A MASTER'S MESSAGE:** Hon. W. W. Stetson, State Superintendent of Public Instruction, Augusta, Maine.

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**DEPARTMENT SESSIONS.**

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**Department of Administration**

*President.*

HON. W. W. STETSON.

State Supt. of Public Instruction, Augusta, Maine.

*Wednesday, July 6.—Cruft Hall.*

2.00 P. M.

1. What should be the limits of the powers of the superintendent?
2. What should be the limits of the duties of the superintendent?
3. What means may the superintendent properly employ to raise the salary schedule?

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*Friday, July 8.—Bethlehem Methodist Church.*

2.00 P. M.

1. The election and tenure of office of the superintendent.
2. The relation of the superintendent toward political issues and parties.
3. The school board: (a) Of how many members composed. (b) Schemes of representation.

The meetings of this Department partook of the nature of a "Round Table." Prominent school men of New England participated in the discussions.

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**Department of Kindergartens.**

*President.*

LUCY WHELOCK,

Kindergarten Training School, Boston.

*Thursday, July 7.—Bethlehem Congregational Church.*

2.00 P. M.

THE KINDERGARTEN OF TO-DAY: ITS CRITICS: Miss Nora Atwood, Providence Normal School.

DISCUSSION: Mr. Charles H. Keyes, Supervisor South District Schools, Hartford.

ITS PRACTICE: Miss Rosemary Baum, Supervisor of Kindergartens, Utica, N. Y.

DISCUSSION: Mrs. James H. Stannard, Garland Training School, Boston.

ITS RESULTS: Miss Bertha M. McConkey, Supervisor Primary Schools, Springfield. Mrs. J. L. Hughes, Toronto, Canada.

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*Friday, July 8.—Bethlehem Congregational Church.*

2.00 P. M.

SPECIAL FEATURES OF THE KINDERGARTEN. "LET NATURE BE YOUR TEACHER:" Miss Margaret C. Laidlaw, Supervisor Kindergartens, South District Schools, Hartford.

Mrs. Susan S. Harriman, Training School, Boston.

Miss Florence Scott, Fitchburg Normal School.

WORK IN MUSIC: Miss Margaret C. Seaver, Boston.

WORK IN ART: Miss Anna M. Devereaux, Lowell  
Normal School.

Miss Adeline T. Joyce, Brookline.

AFTER KINDERGARTEN, WHAT? Dr. Colin F. Scott,  
Boston Normal School.

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**Department of Secondary Education.**

*President.*

CHARLES T. C. WHITCOMB,  
English High School, Somerville, Mass.

*Wednesday, July 6, Bethlehem Methodist Church.*

2.00 P. M.

THE PLACE AND VALUE OF GREEK: William C. Col-  
lar, Head Master of the Roxbury Latin School.

THE ATTITUDE OF HIGH SCHOOL TEACHERS TOWARD  
THE WORK OF THE FIRST YEAR PUPILS: F. H.  
Beede, Superintendent of Schools, New Haven,  
Conn.

DISCUSSION.

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*Thursday, July 7.—Bethlehem Methodist Church.*

2.00 P. M.

HOW PHYSICS AND CHEMISTRY CAN BE MADE MORE  
PROFITABLE: Dr. Lyman C. Newell, Professor  
of Chemistry, Boston University.



THE HIGH SCHOOL AND CIVIC SPIRIT. William Orr,  
Principal of High School, Springfield, Mass.

THE MORAL INFLUENCE OF SECONDARY SCHOOLS: Dr.  
Endicott Peabody, Head Master of Groton  
School.

DISCUSSION: Harlan P. Amen, Principal of Phillips  
Academy, Exeter.

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**Department of Normal Schools**

*President.*

CHARLES S. CHAPIN,  
State Normal School, Providence, R. I.

*Wednesday, July 6.—Bethlehem High School.*

2.00 P. M.

THE CONDITION AND PROSPECTS OF NORMAL SCHOOLS  
IN NEW ENGLAND: Albert G. Boyden, Princi-  
pal State Normal School, Bridgewater, Mass.

POSSIBLE REFORMS IN THE NORMAL SCHOOL: Wil-  
liam E. Hatch, Superintendent of Schools, New  
Bedford, Mass.

DISCUSSION OF ABOVE PAPERS.

Joseph G. Edgerly, Superintendent of Schools,  
Fitchburg, Mass.

George C. Purington, Principal of State Normal  
School, Farmington, Me.

Louis P. Nash, Superintendent of Schools, Holy-  
oke, Mass.

*Thursday, July 7.—Bethlehem High School.*

2.00 P. M.

THE INCREASING DIFFICULTY OF SUPPLYING THE DEMAND FOR GOOD TEACHERS: Walter P. Beckwith, Principal of State Normal School, Salem.

DISCUSSION.

Ella L. Sweeney, Assistant Supt. of Schools, Providence, R. I.

F. H. Beede, Superintendent of Schools, New Haven, Conn.

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**Department of Elementary Schools.**

*President.*

WALTER E. RANGER,

State Superintendent of Public Instruction, Vermont.

*Thursday, July 7.—Cruft Hall.*

2.00 P. M.

GENERAL TOPIC: SUBJECTS AND COURSES OF STUDY IN ELEMENTARY SCHOOLS.

I. ESSENTIALS OF AN ELEMENTARY COURSE.

- a. On what, as vital, is there general agreement?
- b. What may be eliminated from present courses?
- c. What subjects and arts should receive more attention?

Supt. Clarence H. Dempsey, St. Johnsbury, Vt.

Prin. Charles A. Brodeur, Westfield, Mass.

2. THE RELATION OF PRACTICAL AGRICULTURE TO THE COURSE OF STUDY: Prin. John L. Alger, Johnson, Vt.
3. SUBJECTS, ARTS, AND COURSES FOR RURAL SCHOOLS.  
Miss Celeste E. Bush, Niantic, Conn.

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*Friday, July 8.—Cruft Hall.*

2.00 P. M.

GENERAL TOPIC: RURAL SCHOOL PROBLEMS.

1. IMPROVEMENT OF SCHOOL EDUCATION IN RURAL COMMUNITIES:  
(a) From within. (b) From without.  
Hon. G. T. Fletcher, Northampton, Mass.
2. POSSIBILITIES AND LIMITATIONS, ADVANTAGES AND DISADVANTAGES, OF UNITING RURAL SCHOOLS.  
Hon. Channing Folsom, Concord, N. H.
3. THE RURAL SCHOOL'S ADVANTAGE.  
Prin. William A. Beede, Morrisville, Vt.
4. CLASSIFICATION AND PROGRAMS IN RURAL Schools.  
Mrs. Anna D. Pollard, Supt. of Schools, South-  
ington, Conn.
5. SANITATION AND MORALS IN RURAL SCHOOLS.  
B. E. Merriam, Supt. of Schools, Bellows Falls,  
Vt.

## BUSINESS PROCEEDINGS.

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During the General Session the following business was transacted:

*Tuesday, July 5.*

The Board of Directors met at the close of the evening session and it was

Voted:—That the usual tax of one dollar be levied upon each member of the Institute for the year 1904.

*Wednesday, July 6.*

At the morning session President Keyes appointed the following Committees:

*On Resolutions.*

O. M. Lord, Maine; M. C. Smart, New Hampshire; J. L. Alger, Vermont; L. P. Nash, Massachusetts; C. E. Dennis, Rhode Island; W. I. Twitchell, Connecticut.

*On Nominations.*

W. W. Stetson, Maine; Channing Folsom, New Hampshire; Clarence H. Dempsey, Vermont; Bertha M. McConkey, Massachusetts; Walter B. Jacobs, Rhode Island.

*Thursday, July 7.*

At the evening session Mr. O. M. Lord, Superintendent of Schools of Portland, Me., presented, in behalf of the Mayor and Board of Trade of his city, an invitation to the Institute to hold its next annual meet-

ing in Portland. Mr. Lord set forth the advantages of Portland for such a meeting and urged the acceptance of his invitation.

On motion of W. W. Stetson it was Voted: That the thanks of the Institute be extended to Mr. Lord and those whom he represented for their cordial invitation and that the matter be referred to the Executive Committee for their consideration.

*Friday, July 8.*

At the morning session the Committee on Resolutions reported as follows:

1. *Resolved*, That the thanks of the Institute are due to the President, for his untiring and efficient efforts in arranging and conducting the meeting, and to each of the executive officers, to the heads of the different departments, to those who have contributed by papers, discussions, and music, to the very excellent program; also to the Bethlehem Board of Trade, to the officers of the railroads, to the hotel proprietors, and citizens who have contributed to the comfort and enjoyment of the occasion.

2. *Resolved*, That we recommend measures to promote the collection of facts of educational experience, and concerted experimentation, and urge that the states represented at this meeting should co-operate with the committee of eleven appointed by the Department of Superintendence of the National Educational Association for this work.

3. *Resolved*, That in consequence of the rapid increase in cost of living during recent years, and the relative reduction of the salaries of teachers because of the failure of such salaries to make corresponding

absolute advance, we believe that good teachers are being driven from the profession, and young people of excellent promise are deterred from entering it; we believe further that the present standards of teaching can be maintained and elevated only by an immediate and general advance in the salaries of teachers and supervisors.

4. *Resolved*, That we recommend the use of all proper means to induce the people in rural towns to accept the advantages offered by skilled supervision.

5. *Resolved*, That we depreciate the present tendency to introduce into the athletic contests of secondary schools and colleges such professional methods or encourage the use of unfair means to win games.

6. And we venture to express a hope that a way may be provided whereby a college student, in good and regular standing, may be permitted to earn money in the field of athletics, to aid him in his college course, without prejudicing his relationship to college athletics.

Signed,

LOUIS P. NASH,  
W. I. TWITCHELL,  
M. C. SMART,  
C. E. DENNIS,  
JOHN L. ALGER.

The report of the Committee on Resolutions was accepted and its provisions were adopted.

The Treasurer made reports for the meeting at Burlington, Vt., 1902, and for that held in connection with the N. E. A. at Boston, Mass., 1903. The reports were accepted and adopted.

The Committee on Nominations presented the following nominees:—

*President.*

CHARLES H. KEYES, Hartford, Conn.

*Vice-Presidents.*

MAINE.

W. J. Corthell, Gorham.  
Elizabeth Hall, Lewiston.  
John S. Locke, Saco.  
George C. Purington, Farmington.  
W. E. Russell, Gorham.  
Charles E. Tilton, Bangor.  
Charles L. White, Waterville.

NEW HAMPSHIRE.

Channing Folsom, Dover.  
Lemuel S. Hastings, Nashua.  
Henry C. Morrison, Portsmouth.  
Henry C. Sanborn, Franklin Falls.  
William J. Tucker, Hanover.

VERMONT.

John L. Alger, Johnson.  
M. H. Buckham, Burlington.  
D. Y. Comstock, St. Johnsbury.  
Ernest G. Ham, Montpelier.  
O. D. Matherson, Barre.  
Henry O. Wheeler, Burlington.  
N. J. Whitehill, White River Junction.  
H. K. Whittaker, Brattleboro.

MASSACHUSETTS.

George I. Aldrich, Brookline.  
Sarah L. Arnold, Boston.  
Thomas H. Barnes, South Boston.  
Herbert H. Bates, Cambridge.  
Walter P. Beckwith, Salem.  
Albert G. Boyden, Bridgewater.  
Francis Cogswell, Cambridge.  
E. J. Cox, Newtonville.  
William N. Cragin, Bedford.  
M. Grant Daniel, Boston.

Joseph G. Edgerly, Fitchburg.  
Gertrude Edmund, Lowell.  
Edward R. Goodwin, Worcester.  
W. F. Gordy, Springfield.  
Charles P. Hall, Shelburne Falls.  
Henry C. Hardon, South Boston.  
William E. Hatch, New Bedford.  
Joseph Jackson, Worcester.  
Robert C. Metcalf, Winchester.  
Charles H. Morse, Medford.  
William A. Mowry, Hyde Park.  
A. Eugene Nolen, Fitchburg.  
Lincoln Owen, Boston.  
Edwin P. Seaver, Boston.  
Gordon A. Southworth, Somerville.  
John L. Tilton, Boston.  
Edwin H. Whitehill, Bridgewater.  
Henry Whittemore, Framingham.  
William H. Winslow, Revere.

#### RHODE ISLAND.

Sarah Dyer Barnes, Providence.  
George E. Church, Providence.  
E. Harrison Howard, Providence.  
David W. Hoyt, Providence.  
Walter B. Jacobs, Providence.  
Nathan G. Kingsley, Providence.  
Horatio B. Knox, Providence.  
Joseph E. Mowry, Providence.  
William T. Peck, Providence.  
Horace S. Tarbell, Providence.  
Charles S. Chapin, Providence.  
Charles E. Dennis, Providence.

#### CONNECTICUT.

Elizabeth G. Brewster, Norwich.  
David N. Camp, New Britain.  
Walter B. Ferguson, Middletown.  
Adelaide V. Finch, Waterbury.  
Giles A. Stewart, New Britain.  
Fred A. Verplanck, South Manchester.  
W. I. Twitchell, Hartford.  
F. H. Beede, New Haven.

#### NEW YORK.

Mary S. Snow, Brooklyn, N. Y.



*Secretary.*

WILLIAM C. CRAWFORD, Boston, Mass.

*Assistant Secretary.*

PAYSON SMITH, Auburn, Me.

*Treasurer.*

ALVIN F. PEASE, Malden, Mass.

*Assistant Treasurer.*

NATHAN L. BISHOP, Norwich, Conn.

*Counsellors.*

William F. Bradbury, Cambridge, Mass.  
Fred Gowing, Boston, Mass.  
Charles D. Hine, Hartford, Conn.  
Ray Greene Huling, Cambridge, Mass.  
James E. Klock, Plymouth, N. H.  
George H. Martin, Lynn, Mass.  
Charles W. Parmenter, Cambridge, Mass.  
Walter E. Ranger, Johnson, Vt.  
William W. Stetson, Auburn, Me.  
Thomas B. Stockwell, Providence, R. I.  
Edgar E. Thompson, Worcester, Mass.  
George A. Walton, West Newton, Mass.  
Albert E. Winship, Boston, Mass.

*Standing Committees.*

## ON MEMBERSHIP.

Walter E. Ranger, *Chairman*, Montpelier, Vt.  
Sarah Dyer Barnes, Providence, R. I.  
Henry Whittemore, Framingham, Mass.  
G. A. Stuart, New Britain, Conn.  
Channing Folsom, Dover, N. H.  
A. F. Richardson, Castine, Me.

## ON NECROLOGY.

A. G. Boyden, *Chairman*, Bridgewater, Mass.  
Thomas B. Stockwell, Providence, R. I.  
David N. Camp, New Britain, Conn.

## ON FINANCE.

George H. Martin, *Chairman*, Lynn, Mass.

George C. Purington, Farmington, Me.

\* Isaac Thomas, Burlington, Vt.

Respectfully submitted,

WALTER BALLOU JACOBS,

*Secretary of Committee.*

Vice President Boyden took the chair. It was then Voted to accept the report of the Committee on Nominations and to instruct the Assistant Secretary to cast the ballot of the Institute for the list of officers reported by this Committee. This having been done the officers were declared elected.

At the close of the evening session the newly elected Board of Directors met and it was

Voted:—That a Book of Proceedings containing a report of the doings of this convention, a list of members, and abstracts of addresses be printed and that the President, Secretary, and Treasurer constitute a committee for preparing and issuing such book.

PAYSON SMITH,

*Assistant Secretary.*

## NOTE.

A record of the doings of the American Institute of Instruction during the Boston meeting of the National Educational Association, July 6-10, 1903, will be found on page 195.

MEMBERS  
OF THE  
AMERICAN INSTITUTE OF INSTRUCTION.

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HONORARY MEMBER.

Camp, David N., New Britain, Conn.

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ACTIVE MEMBERS.\*

MAINE,

Adams, Emerson L.....	Fryeburg
Bennett, Myron E.....	Sanford
Benson, Fred.....	Westbrook
Bisbee, H. M.....	Brewer
Burleigh, S. A.....	Rumford
Carey, C. Wilbur.....	Rumford Falls
Chase, Albro E.....	Portland
Chase, George C.....	Lewiston
Cobb, Florence E.....	Gardiner
Cole, Albert S.....	Thomaston
Conary, Wiley C.....	Bluehill Falls
Cook, Charles F.....	Augusta
Coombs, Tyler M.....	Vinal Haven
Corliss, Lewis H.....	Bridgton
Corthell, W. J.....	Gorham
Dunton, John R.....	Belfast
Felch, L. M.....	Houlton
Fellows, George E.....	Orono
Fish, Charles.....	Brunswick
Foreman, Frederick H.....	Bath
Fuller, Sidney T.....	Kennebunk
Gould, Royal E.....	Biddeford
Hall, Elizabeth.....	Lewiston
Johnson, Franklin W.....	Waterville

\*Members are requested to notify the Secretary of errors or omissions

Kaler, James O.....	So. Portland
Locke, J. S.....	Saco
Lord, Orlando, M.....	Portland
Mallett, W. G.....	Farmington
Paine, Geo. E.....	No. Anson
Parmenter, E. E.....	Portland
Perry, Oscar H.....	Portland
Phillips, J. C.....	Lewiston
Powers, William L.....	Gardiner
Purington, G. C.....	Farmington
Richardson, Albert F.....	Castine
Richmond, Mabel A.....	Augusta
Russell, Walter H.....	Bluehill
Russell, W. E.....	Gorham
Ryan, J. F.....	Calais
Sargent, W. E.....	Hebron
Smith, Payson.....	Auburn
Stetson, Hon. W. W.....	Auburn
Stone, Charles T.....	Bridgton
Stone, Miss G. L.....	Gorham
Tilton, Charles E.....	Bangor
White, Charles L.....	Waterville
Williams, H. R.....	Foxcroft
Wyman, Elwood T.....	Waterville

## NEW HAMPSHIRE.

Abbot, Blanche N.....	Laconia
Amen, Harlan P.....	Exeter
Bickford, Charles W.....	Manchester
Blaisdell, J. H.....	Laconia
Chase, Alice M.....	Portsmouth
Crawford, A. B.....	Newmarket
Folsom, Hon. Channing.....	Dover
Ham, Florence A.....	Portsmouth
Harris, T. W.....	Keene
Hastings, Lemuel S.....	Nashua
Hulse, Edgar E.....	Salem Depot
Klock, J. E.....	Plymouth
Knapp, Allen H.....	Portsmouth
Libbey, Fred S.....	Warner
Libby, George H.....	Manchester
Morrison, Hon. H. C.....	Portsmouth
Richards, Clinton J.....	Walpole
Roberts, Thomas L.....	Lebanon
Robertson, Sam'l W.....	Woodsville

Sanborn, Henry C.....	Franklin Falls
Silver, Ernest I.....	Portsmouth
Smart, Melville C.....	Littleton
Stearns, Henry B.....	Marlboro
Tracy, Charles.....	Claremont
Walker, Isaac.....	Pembroke
Wallace, Charles L.....	Lisbon
Whitcher, Geo. H.....	Berlin
Woodbury, Ernest R.....	Meriden

## VERMONT

Abbott, Winthrop P.....	Proctor
Alger, J. L.....	Saxtons River
Alger, Mrs. J. L.....	Saxtons River
Allen, Grace A.....	Westford
Allen, J. E.....	Westford
Allen, Mrs. J. E.....	Westford
Bartley, Joseph D.....	Burlington
Beebe, W. A.....	Morrisville
Bell, Ethel B.....	Alburg, Vt.
Boswell, Miss F. J.....	Burlington
Bristol, Elsie I.....	Vergennes
Chandler, Mabel W.....	Gouldsville
Chase, S. Carrie.....	Morrisville
Chittenden, M. D.....	Fairfax
Codding, J. O.....	Westminster West
Colby, Ruth M.....	Newport
Cowles, C. L.....	Stowe
Darling, Evelyn.....	Hartland
Dempsey, Clarence H.....	St. Johnsbury
Dinsmore, Charles H.....	Canaan
Dodge, Mrs. Frank.....	Johnson
Downing, M. W.....	Bellows Falls
Erskine, S. H.....	Rutland
Ewins, Blanche N.....	North Troy
Farrell, Mary A.....	Burlington
Frasier, Willard A.....	Rutland
Gates, Mary L.....	Montgomery
Greene, E. F.....	Richford
Griffin, Miss G. I.....	St. Johnsbury
Ham, Ernest G.....	Randolph
Harwood, C. H.....	West Newbury
Hodgkins, Josie H.....	Johnson
Huntoon, Eliza A.....	Wallingford
Howe, Carlton B.....	McIndoe Falls

Howes, Alfred F.....	Middlebury
Ingalls, Elwyn L.....	Hyde Park
Ingalls, Evelyn C.....	Hyde Park
Johnson, Addie A.....	Salisbury
Kibbey, H. H.....	Northfield
Leavenworth, P. R.....	Castleton
Loomis, Clara B.....	Burlington
Macomber, Eva M.....	Westford
Malaney, Lois J.....	Burlington
Marrs, Lida H.....	Waterbury
Martin, C. H.....	Essex Junc.
Mathewson, O. D.....	Barre
Maurice, Mamie A.....	Cambridge Junc.
Maurice, W. C.....	Sheldon
McLachlin, Edward H.....	East Peacham
Merriam, B. E.....	Bellows Falls
Miller, Kate P.....	Burlington
Morgan, Jennie A.....	Lincoln
Morrill, C. H.....	Bakersfield
Morse, Anna L.....	Cambridge
Mower, Anna L.....	Morrisville
Nelson, Mabel.....	Burlington
Prichard, Fred E.....	Randolph
Ranger, Hon. Walter E.....	Johnson
Richmond, Ruth E.....	Newport
Rublee, Edna S.....	Morrisville
Severence, Rev. M. L.....	Burlington
Scribner, D. H.....	Hyde Park
Stanhope, Laura V.....	Enosburg Falls
Stannard, H. J.....	Barton
Stewart, Jennie B.....	Randolph
Stone, Mason S.....	Morrisville
Sterns, Charles H.....	Johnson
Strong, Mary E.....	Morrisville
Taylor, W. H.....	Hardwick
Terrill, Kate.....	Montpelier
Terrill, Lillian R.....	Underhill
Thomas, Isaac.....	Burlington
Towle, Phebe M.....	Burlington
Tucker, Marguerite E.....	Brattleboro
Tuttle, A. E.....	Bellows Falls
Vasseur, Catalena.....	Brandon
Wheeler, Henry O.....	Burlington
Wheeler, Mary L.....	Fairfax
Wheeler, Mary L.....	Irasburg

Whittaker, H. K.....	Brattleboro
White, C. H.....	Barre
Whitehill, N. J.....	White River Junc.
Whitlock, Alice E.....	Brandon

## MASSACHUSETTS.

Adams, Enoch C.....	West Newton
Aldrich, George I.....	Brookline
Allen, Eliza C.....	Lynn
Arnold, Sarah L.....	Boston
Badger, Abner A.....	Walpole
Bagnall, F. A.....	Adams
Baker, A. G.....	499 Main Street, Roxbury
Balch, Gardner P.....	W. Roxbury
Baldwin, William A.....	Hyannis
Barnes, Thomas H.....	South Boston
Barrows, Anna .....	Boston
Bartlett, Grace E.....	Wellesley
Bates, Herbert H.....	Cambridge
Bates, William C.....	Fall River
Beckwith, Walter P.....	Salem
Benedict, Frank H.....	Sutton
Billings, John D.....	Cambridge
Blake, Elsie M.....	64 Harold Street, Roxbury
Polan, Joel C.....	Newton Centre
Bouton, Eugene.....	Pittsfield
Boyden, A. G.....	Bridgewater
Bradbury, William F.....	Cambridge
Bradley, John E.....	Randolph
Brayton, Percy L.....	West Medford
Brick, F. S.....	Uxbridge
Briggs, Alton E.....	Chelsea
Brodeur, Clarence A.....	Westfield
Brockway, C. E.....	West Springfield
Eryant, W. H. H.....	29A, Beacon Street, Boston
Buckman, Katherine M.....	Wellesley
Bunker, Alfred.....	27 Juniper Street, Roxbury
Burbank, Ella L.....	35 College Avenue, Medford
Burdett, J. H.....	Dedham
Butler, Wilson R.....	New Bedford
Carfrey, J. H.....	Springfield
Carpenter, Emily F.....	Boston
Carter, Emma S.....	Rockport
Caverly, J. L.....	Newton
Champney, Abbie A.....	102 Pembroke Street, Boston



Clark, W. A., Jr.....	7 Water Street, Boston
Cogswell, Francis.....	Cambridge
Cole, Aaron B.....	Plainville
Colleston, Frank M.....	Salem
Cook, F. H.....	Leominster
Courtney, Frank P.....	Hyde Park
Cowell, Hervey S.....	Ashburnham
Cox, E. J.....	Newtonville
Cragin, William N.....	Bedford
Crawford, William C.....	Allston
Cummings, W. H.....	Hadley
Curtis, Jason L.....	Hyde Park
Daniell, M. Grant.....	Roxbury
Davison, Frank P.....	Turners Falls
Dearborn, Mary E.....	Quincy
Dickerman, Quincy E.....	Boston
Dustan, Dana M.....	Worcester
Dressel, H., Jr.....	Great Barrington
Eaton, George T.....	Andover
Eaton, Walter S.....	Revere
Edgerly, Joseph G.....	Fitchburg
Edmund, Gertrude.....	Lowell
Eliot, Charles W.....	Cambridge
Easton, Norman L.....	Fall River
Fay, Alfred C.....	Bridgewater
Fellows, Mary S.....	Norwood
Fifield, Albert B.....	Newtonville
Fletcher, Grenville T.....	Northampton
Friend, Alice C.....	Wellesley
Fuller, Robert J.....	Palmer
Gay, George E.....	Malden
George, A. J.....	Newtonville
Getchell, Merle S.....	Hyde Park
Goodnow, A. Grace.....	Natick
Goodwin, Edward R.....	Worcester
Gowing, Fred.....	Boston
Gordy, W. F.....	Springfield
Gray, I. M.....	Somerville
Greenough, James C.....	Westfield
Gregory, B. C.....	Chelsea
Grover, E. Emmons.....	Roxbury
Grover, Edward O.....	Cambridge
Guss, Roland W.....	N. Adams
Hall, Charles P.....	Shelburne Falls
Hall, I. Freeman.....	North Adams



Hardon, Henry C.....	Newton
Hardy, Audobon L.....	Amherst
Harrington, W. L.....	Charlestown
Hartman, E. T.....	Boston
Hatch, William E.....	New Bedford
Hayward, Harriet S.....	Brockton
Hazard, Caroline H.....	Wellesley
Heath, D. C.....	Boston
Hervey, Henry D.....	Malden
Hinds, Benjamin J.....	Stoneham
Hine, Roderick W.....	Dedham
Hoey, Elizabeth G.....	Natick
Holland, Sara J.....	E. Taunton
Holman, Frank N.....	Springfield
Holmes, S. H.....	Haverhill
Howard, Loea P.....	Boston
Howe, William W.....	Roxbury
Huling, Ray Greene.....	Cambridge
Hunt, C. L.....	Clinton
Hussey, Vina F.....	Wellesley
Hutchins, John W.....	Malden
Hutchinson, S. C.....	Dighton
Isham, Casper.....	40 Charlotte Street, Dorchester
Jackson, Charles S.....	Lynn
Jackson, Joseph.....	Worcester
Jackson, M. H.....	E. Boston
Jacoby, Asher J.....	Milton
Jarvis, Dr. Wm. F.....	Waltham
Kelley, Augustus H.....	Boston
Kelly, William P.....	Attleboro
Kenerson, A. H.....	Boston
Keyes, Mary F.....	So. Boston
Leadbetter, Florence E.....	Roslindale
Learned, Alonzo K.....	Holden
Leary, James H.....	Charlestown
Lewis, Homer P.....	Worcester
Libbey, George W.....	Boston
Lincoln, Arthur A.....	29 Percival, Dorchester
Lingham, C. H.....	Boston
Litchfield, Joshua Q.....	Wollaston
Lovering, Edwin N.....	Winchester
Lundberg, Josephine.....	Lawrence
Lyman, C. S.....	Amesbury
Marsh, Frank M.....	Fairhaven
Martin, George H.....	Lynn
May, Nellie C.....	Maynard

Mayers, Alanson H.....	Dorchester
McAllister, T. K.....	Newton
McArdle, Mary H.....	Attleboro
McConkey, Bertha M.....	Springfield
McDonald, James R.....	Boston
McDonald, Mrs. Etta A. B.....	West Medford
Merrick, C. F.....	Allston
Metcalf, R. B.....	Boston
Metcalf, Robert C.....	Winchester
Monk, Susan H.....	Wellesley
Monroe, Will S.....	Westfield
Moore, George H.....	Boston
Morgan, Marion H.....	Methuen
Morse, Herbert L.....	W. Roxbury
Moulton, J. Sydney.....	Stowe
Murphy, George E.....	Dorchester
Nash, Louis P.....	Holyoke
Newell, Lyman C.....	Boston
Nickerson, Fred H.....	Melrose
Nolen, A. Eugene.....	Fitchburg
Orr, William.....	Springfield
Owen, Frederic L.....	7 Bowdoin Avenue, Dorchester
Owen, Lincoln.....	Boston
Packard, H. S.....	Walpole
Page, Caleb A.....	Methuen
Page, James A.....	Boston
Parker, Edward.....	Brockton
Parker, Henry C.....	40 Chute Street, Reading
Parker, Walter S.....	Boston
Parkinson, William D.....	Waltham
Parlin, Frank E.....	Quincy
Parmenter, Charles W.....	Cambridge
Pearson, Alexander.....	Allston
Pease, Alvin F.....	Malden
Peaslee, Frank J.....	Lynn
Perkins, John W.....	Salem
Perry, Eugene A.....	Malden
Phillips, Alice L.....	Wellesley
Pillsbury, Rev. John H.....	Waban
Pinkham, G. Ripley.....	Great Barrington
Pitman, J. Ashbury.....	Marlboro
Quirk, Charles E.....	Boston
Raub, Edgar L.....	Dorchester
Reddy, Josepha.....	250 Cabot, Roxbury
Rhodes, S. L.....	Norwood
Rich, Ruth G.....	31 Windermere Rd., Dorchester

Riley, Herbert S.....	Woburn
Rockwood, Wilbur J.....	Everett
Rugg, George.....	Princeton
Russell, B. B.....	Brockton
Russell, J. A.....	308 Boylston Street, Boston
Safford, Adelbert L.....	Beverley
Sears, Henry F.....	Melrose Highlands
Seaver, Edwin P.....	Woburn
Sellew, M. E.....	W. Springfield
Shattuck, F. W.....	39 Algonquin Street, Dorchester
Shute, Edward P.....	78 Gainsborough Street, Boston
Simmons, Chas. L.....	Westfield
Sinclair, B. E.....	182 Leyden Street, E. Boston
Small, Fred Ossian.....	Winchendon
Smith, Arthur W.....	Adams
Smith, George A.....	19 Winter Street, Dorchester
Smith, Hamilton I.....	Boston
Southworth, Edward.....	Boston
Southworth, Gordon A.....	Somerville
Spalter, Frank P.....	Winchendon
Stanley, Arthur.....	Hyde Park
Stannard, Mrs. Howard P.....	Boston
Stannard, Margaret J.....	Boston
Stearns, Alfred E.....	Andover
Sutcliffe, F. S.....	Arlington
Swan, Frederick W.....	E. Boston
Tetlow, John.....	Boston
Thompson, Edgar E.....	Worcester
Tupper, Frederic A.....	Brighton
Tyzzar, George A.....	1529 Centre, Roslindale
Valentine, Mary N.....	Wellesley
Vogel, Frank.....	Boston
Walton, George A.....	West Newton
Ward, W. Scott.....	Athol
Warren, Horace W.....	Dorchester
Watkins, H. T.....	Reading
Watts, Alice M.....	Winthrop
Webber, Adelia J.....	Woburn
Weed, Clarence M.....	
Wheeler, U. G.....	Everett
Wheelock, Lucy.....	Boston
Whitcomb, Arthur K.....	Lowell
Whitcomb, C. T. C.....	Somerville
Whitcomb, Mabel E.....	Wellesley
White, Maurice P.....	Boston
Wheeler, F. A.....	Monson

Whitehill, Edwin H.....	Bridgewater
Whiting, William C.....	Melrose
Whitney, Frank W.....	Watertown
Whittemore, Henry .....	Framingham
Wiggin, Elizabeth.....	Malden
Winship, Albert E.....	Somerville
Wightman, J. Lewis.....	Malden
Woodbury, Charles T.....	Fitchburg
Worcester, John C.....	W. Springfield
Wyman, Carrie L.....	Westminster

## RHODE ISLAND.

Almy, Valentine.....	Auburn
Baker, Benjamin.....	Providence
Barnes, Sarah Dyer.....	Providence
Chapin, Charles S.....	Providence
Church, George E.....	Providence
Crandall, D. Alva.....	Rockville
Eddy, William H.....	Providence
Glover, C. Edward.....	Warwick
Harkness, Albert.....	Providence
Horton, Lyman G.....	E. Greenwich
Hosmer, Elmer S.....	Pawtucket
Howard, E. Harrison.....	Providence
Hoyt, David W.....	Providence
Jacobs, Walter B.....	Providence
Kingsley, Nathan G.....	Providence
Keith, Allen P.....	East Providence
Knox, Horatio B.....	Providence
LeGarde, Ellen.....	Providence
Lull, H. W.....	Newport
McFee, Frank E.....	Woonsocket
Meador, Lewis H.....	Providence
Mowry, Wendell A.....	Central Falls
Nye, John M.....	Phenix
Peck, William T.....	Providence
Rich, J. W. V.....	Providence
Russell, Levi W.....	Providence
Sawin, James M.....	Providence
Small, Walter H.....	Providence
Spratt, Frank A.....	Providence
Stockwell, Hon. Thos. B.....	Providence
Sweeney, Ella L.....	Providence
Thompson, Frank E.....	Newport
Whittle, Walter R.....	Westerly
Winslow, Isaac O.....	Providence

## CONNECTICUT.

Akers, W. C.....	New Britain
Ames, Charles L.....	Hartford
Beede, F. H.....	New Haven
Bishop, Nathan L.....	Norwich
Brackett, Frank A.....	Hartford
Brewster, Elizabeth G.....	Norwich
Bush, Celeste E.....	Niantic
Camp, L. L.....	New Haven
Cartwright, W. O.....	Wallingford
Campbell, A. H.....	Windsor
Case, Jennie.....	Southington
Deane, Charles W.....	Bridgeport
Ferguson, Walter B.....	Middletown
Finch, Adelaide V.....	Waterbury
Hine, Hon. Charles D.....	New Britain
Keyes, Charles H.....	Hartford
Nichols, Wilbur F.....	New Haven
Perkins, John R.....	Danbury
Rice, William N.....	Middletown
Rowe, Stuart H.....	New Haven
Smiley, Edward H.....	Hartford
Sneath, E. Hershey.....	New Haven
Stevens, Carrie A.....	Norwich
Strong, B. Norman.....	Hartford
Stuart, G. A.....	New Britain
Twitchell, Willis I.....	Hartford
Verplanck, F. A.....	So. Manchester
Webb, Helen.....	W. Hartford
White, Marcus.....	New Britain
Wiard, Martin S.....	New Britain
Wilkins, Blanche.....	W. Hartford

## NEW YORK.

Balliet, Thomas M.....	Washington Square, New York
Ellery, Edward.....	Schenectady
Lang, Ossian H.....	61 East 9th Street, New York
Mead, Emery L.....	Utica
Walker, Amasa.....	91 Fifth Ave., New York

## NEW JERSEY.

Bennett, Miss Lydia A.....	Leonia
Reed, George H.....	Jersey City

## D. C.

Cummings, G. J.....	Washington
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CONSTITUTION  
OF THE  
AMERICAN INSTITUTE OF INSTRUCTION.

Adopted August, 1879, as a substitute for the older one,  
and amended July, 1886, July, 1891, and July, 1898.

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PREAMBLE.

We, whose names are hereunto subjoined, pledging our zealous efforts to promote the cause of popular education, agree to adopt the following Constitution.

ARTICLE I.—NAME.

The society shall be known by the title of the American Institute of Instruction.

ARTICLE II.—MEMBERS.

1. The members of the Institute shall be divided into three classes, styled active, associate, and honorary.
2. Any person interested in the cause of education and recommended by the Committee on Membership may become an active member by a major vote of the members present and voting at any regular meeting.
3. Only active members shall be empowered to vote and hold office.

4. Any active member who shall for the period of one year neglect to pay the annual assessment, shall by such neglect forfeit his membership.

5. Any person of good moral character may become an associate member for the current year by paying the annual assessment.

6. Honorary members may be elected by the Institute on recommendation of two-thirds of the Directors present at any stated meeting of the Board.

#### ARTICLE III.—MEETINGS.

1. The Annual Meeting shall be held at such time and place as the Board of Directors shall appoint.

2. Special meetings may be called by the Directors.

3. Due notice of the meetings of the Institute shall be given in the public journals.

#### ARTICLE IV.—OFFICERS.

1. The officers of the Institute shall be a President, Vice-Presidents, a Secretary, an Assistant Secretary, a Treasurer, an Assistant Treasurer, and twelve Counsellors, all of whom shall constitute a Board of Directors.

2. The officers shall be elected annually by ballot and shall continue in office till their successors shall be chosen.

#### ARTICLE V.—DUTIES OF OFFICERS.

1. The Secretary shall give notice of all meetings of the Institute and of the Board of Directors and shall keep a record of their transactions.

2. The Treasurer shall collect and receive all moneys of the Institute, and shall render an accurate



statement of his receipts and payments annually, and whenever called upon by the Board of Directors, to whom he shall give such bonds for the faithful performance of his duty as they shall require. He shall make no payment except by the order of the Finance Committee of the Board.

3. The Board of Directors shall devise and carry into execution such measures as may promote the general interests of the Institute, shall have charge of the property of the Institute, shall be authorized to publish its proceedings and such papers relating to education as may seem to them desirable. They shall have power to fill all vacancies in their Board, from members of the Institute, and make By-Laws for its government. They shall have power to vote an annual assessment of one dollar upon the members, except honorary members, and to remit the payment thereof, when in their judgment it may seem wise to do so. They shall annually elect the following standing committees:

(1) A committee of six, who with the President, Secretary, and Treasurer shall constitute the Committee on Membership, whose duty it shall be to report to the Institute from time to time, the names of such persons as they may recommend for membership.

(2) A committee of three on Finance, whose duty it shall be to audit the accounts of the Treasurer, and under the control of the Board of Directors, to draw orders on the Treasurer for the payment of charges against the Institute.

(3) A committee of three on Necrology.

4. Stated meetings of the Board shall be held on the first Saturday in January and on the first day of the Annual Meeting of the Institute.



## ARTICLE VI.—BY-LAWS AND AMENDMENTS.

1. By-Laws not repugnant to this Constitution may be adopted at any regular meeting.
2. This Constitution may be altered or amended by a vote of two-thirds of the members present at the Annual Meeting, provided two-thirds of the Directors present at the stated meeting shall agree to recommend the proposed alteration or amendment.

## BY-LAWS.

1. At all meetings of the Board of Directors, seven members shall be necessary to constitute a quorum to do business.
2. It shall be the duty of the Secretary, on application of any two Directors, to call special meetings of the Board at such time and place as the President may appoint.
3. Before each Annual Meeting the Treasurer shall have printed certificates of membership, numbered consecutively from one upward. These certificates shall be attached to stubs having the corresponding numbers printed thereon. The book of stubs left after the certificates of membership are detached therefrom shall form a part of the Treasurer's account, to be delivered to the Finance Committee, for the purpose of auditing the accounts of the Institute.

## ABSTRACTS OF ADDRESSES.

PRESIDENT'S ADDRESS.

### PHYSICAL EQUIPMENT FOR A LIFE OF SERVICE.

CHARLES H. KEYES, SUPERVISOR, SOUTH DISTRICT PUBLIC SCHOOLS, HARTFORD, CONN.

The American home has delegated to the State the education of America's children. The State has accepted responsibility for the care and culture of the child and the home has a right to demand that the work of the schools shall bear fruit in *open minds, warm hearts, and vigorous bodies.*

For the *intellectual* and *moral* culture of children committed to their charge, teachers generally hold themselves to a strict accountability. The selection of teachers and the arrangement of courses and means of instruction, by our school boards and supervising officers, keep quite constantly in mind these two aims of education. It may be fairly urged that a high degree of success has crowned our endeavors to attain these two results. But in the culture of bodies, in the protection and increase of health and vigor, we have been and still are sadly lacking. True, we have in many of our city systems, teaching of gymnastics, and what we are pleased to style work in physical culture; but nine-tenths of it is haphazard, unsystematic and unscientific. In most instances, it does not even make a pretense of discovering the physical and nervous condition of the child, and then addressing itself to

the condition disclosed. It is ordinarily a combination of spectacular circus drill and patent calisthenic medicine administered by brigades.

Both the neglect and the malpractice so generally observable are evidently due to a lack of clear appreciation of the responsibility and the opportunity of the school, in this most important field of endeavor. It is the purpose of this address to set forth briefly what seems to the speaker to be clearly the fair responsibility of the common school for the care and culture of the bodies of the children.

The home has a right to demand that every year spent in the common school shall bring to the child bodily vigor and physical control. Let us note the most important specifications. Intelligent co-operation of home and school should bring the child to the close of each successive year of his elementary school life with ten different increments to his equipment for a life of efficient service.

1. He should weigh more.
2. He should be taller.
3. He should have increased lung capacity.
4. He should see better.
5. He should hear better.
6. He should have stronger and more flexible voice.
7. The sense of touch and resistance should be more accurate and intelligent.
8. He should be stronger and more dextrous in hands and arms.
9. He should be able to walk farther and better.
10. He *should be on the whole more resistant to disease.*

First. A definite contribution to all ten of these important equipments results from constant attention in both precept and general regimen of the school to four important articles of the Gospel of Health.

(a) Cleanliness must be forever exhorted, commanded and exemplified. The teaching should be specific and the insistence on personal cleanliness constant.

But the important provisions for the triumph of this article are to be found in the school plant and its administration and in the example of a health loving teacher.

We need *well washed, perfectly swept, carefully dusted*, well ventilated school rooms, halls, passage ways and toilets, never overheated, and on which neither work nor water are ever spared. Generous provision must also be made for personal ablutions which do not involve the use of the community towel and for pure drinking water without the use of that foulest of abominations, the school drinking cup. We have now numerous effective devices making the cup unnecessary. The teacher in person should always exemplify this supreme condition of health-perfect cleanliness, and be one who truly knows the joy of living.

(b) Open air exercise is the second article of this great gospel which is too often preached and then systematically prohibited by the school. It is useless to wax eloquent about the value of open air exercise and then keep pupils *in at recess* or *after school* or demand of them a burden of home study that makes its indulgence impossible.

Every pupil should have all of every recess and be

as promptly dismissed at the close of every session as he is requested to be prompt at its beginning. Home study is important not only in the high but in the elementary school,—but it should never be permitted to prevent the child having at least two and one-half hours of every afternoon in the sunshine and the breeze.

\* (c) Generous sleep is the third article of a gospel against whose keeping home, school, and church even are constantly tempting. Never *less* than *eleven* hours of sleep for the child in the primary school, *ten* hours for the child in the *grammar* school, and *nine to ten* for the high school pupil should be the rule. In this connection again, the home study limits ought to be strictly insisted upon. No rationally managed school requires any home study of its pupils in the first five grades. On the other hand nothing but mawkish sentimentality would tolerate or support upper grammar grades or high schools which did not require such work. But it must be kept within sane limits. The following limits should not be passed by any but children of extraordinary vigor.

Grammar School—Sixth Grade—30 minutes daily.

Grammar School—Seventh Grade—60 minutes daily.

Grammar School—Eighth and Ninth Grades—90 minutes daily.

High School—First and Second Years—150 minutes daily.

High School—Third and Fourth Years—180 minutes daily.

(d) Simple and healthful food is the fourth article of this Gospel of Health. It needs to be taught in the

schools and *in* and *to* the homes. More children suffer in health and school activity from *over eating* or *un-wise* eating than from insufficient food. Where the home arrangement permit, the chief meal of the day should be taken when an hour of almost perfect rest can follow it. No lunch taking should ever be permitted on the part of pupils living within three quarters of a mile of the school building.

The fine art of eating and care of the teeth are important subjects of instruction. In this connection children need be taught the danger of narcotics and stimulants.

- (a) Total abstinence the only safety of growing boys and girls.
- (b) Why athletes avoid alcohol and tobacco.
- (c) Why growing children must avoid them.
- (d) Why intellectual excellence, athletic skill, and best bodily growth are inconsistent if not impossible with the habitual use of alcohol or tobacco during the twenty or twenty-four years that the body is attaining its full stature.

This instruction should be clear cut and scientific—no quibbling and no preaching. 'Tis not the teacher's mission to reform the adult world but to inform, preserve and protect the boys and girls in school. Be energetic and whole hearted in this and leave the other reform to the churches and temperance societies. They are efficient and willing to carry their burden if the school will but care for the children.

Turning now to the specific equipments named at the outset, I observe that the first three are not only equipments for the efficient life but they are almost certain indexes of health. Unless increase in weight,

height and chest girth are shown every year, the counsel of an intelligent physician should be sought and followed.

Parents and teachers need to know more of this subject of the stature of the growing child. We have the results of the careful study and measurement of many thousands of children. Upon the power to see and hear well depends so much of the school's efficiency, that it seems little less than criminal for a teacher to begin a year's work without first knowing pretty accurately the visual and auditory limitations of every pupil in her room. A few of our states have enacted very wise laws providing for the annual examination of the eyes of school children. The statute of Connecticut is one of the best.

The lighting of the school room is a point of the highest importance. Too little light and exposure to radical changes of light are the chief defects.

No sense needs more specific training, no organs more intelligent care, than the visual. The fifth equipment, power to hear, is improved by *wise seating*, intelligent work in *singing, speaking, and reading*, and by protection of the general health.

The efficient and cultivated voice which I have named as the sixth equipment for human service is important not simply for public speakers and singers but for all who desire long life. Good singing and fine oral reading make one of their largest contributions to longevity. Their emphasis makes for increased vitality.

The next three powers are especially cultivated through our manual training and rational work in physical culture. And since the tenth, resistance to



disease, is the concomitant as well as the resultant of wise development of the other seven I only ask your attention to the two features of the modern school regime whose development can do most to insure that every child shall come into his heritage of a serviceful body.

Medical supervision and rational work in physical culture are the two agencies that need to be more generously invoked. The work of medical supervision has been well begun in a number of cities.

Rational physical culture is almost unknown in American public schools below the high school grade. This is due to the fact that we have undertaken to provide for it only in platoons and no effective work is ever possible under these conditions. With this demand, the training institutions have sent us what we seemed to be asking, masters or mistresses of the calisthenic art, an art which may or may not have any contributory relation to the preservation and increase of individual health. We have compelled these men and women to drill squads of fifty to one hundred children at a time, and the only wonder is that so much good and no more harm has resulted. What is needed, is men and women of such thorough training in biology as well as anatomy, physiology, and hygiene; such thorough knowledge of brains, nerves, hearts, lungs, stomachs, kidneys, eyes, ears, throats,—as well as of muscles,—that they are able to address themselves to the physical and nervous condition of the individual child and prescribe and direct the exercise which will be both corrective and developmental, remembering that what is food for one is poison for another.



This means trained women for our girls and younger children, and trained men for our older boys. It means persons of sufficiently high training and intelligence to have general charge of the health of our children, responsibility second to none in importance because it conditions all our work for minds or morals.

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## DEPARTMENT OF KINDERGARTENS.

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### THE KINDERGARTEN OF TO-DAY—ITS PRACTICE.

ROSEMARY BAUM, UTICA TRAINING SCHOOL, UTICA, N. Y.

#### DISCUSSION.

The present condition of the kindergarten in relation to other departments of education is not unlike that of the youngest member of a large family. The baby finds himself at first a center of admiring interest. It is not surprising if he gains an undue sense of his own importance. But it is manifestly unfair that the members of the family who have contributed to the spoiling of the child should later refuse to help him to find his right relation to society.

There are critics of the kindergarten who claim to have lost faith in it because of the shortcomings of its representatives, forgetting that if men had lost faith in principles because of failures in applying them not only all departments of education but Christianity it-

self would have been abandoned long ago. It should be remembered that the kindergarten is in process of adjusting itself to the conditions of the American public school.

By this I would not be understood as expressing an opinion that any radical change in the plan of the kindergarten is taking place. As long as there are kindergartens they must be Froebelian kindergartens. Only one system of education is entitled to the name of kindergarten. If others devise a different system it must bear a different name. In the kindergarten the principles regarded by Froebel as fundamental must be observed, even though applied in different ways. The games and songs are assuming new and better forms as educational experience progresses, but we must not violate the law which demands universal and typical play-experiences for children. New gifts, if introduced, must furnish better illustrations of the principles underlying the original ones. That satisfactory substitutes for the kindergarten gifts might be found is not inconceivable; that they are not yet forthcoming most of us will agree. In the occupations one finds a tendency to do work which exercises larger muscles, also to do less of the formal work and more of the work which gives opportunity for self-expression. There must be system and progression in this, however. The materials for the freer work are less expensive than those required for some other occupations, and this fact must be considered in the public schools. The same cannot be said of the introduction of carpenter's tools, the use of which some of us regard as a departure from Froebel's plan of typical and fundamental activities.

The question of two-session kindergartens is still being agitated in many cities. If the establishment of these becomes necessary as a matter of economy, let us frankly admit that from the educational standpoint we are taking a backward step in response to a demand for the curtailing of expense.

The greatest change which is coming over the practice of the kindergarten is in response to a demand for more systematic and thorough work. The question which most of us are considering at present is "How shall we secure more rational and more purposeful plans of daily work?" This question has been answered to the satisfaction of the kindergartners in some of our cities by the adoption in all kindergartens of a program which has been carefully worked out by certain persons well qualified to judge of the needs of children of kindergarten age. Those who object to this plan question whether instead of trying to make better kindergartners by means of a better program it would not be striking nearer the root of the matter to secure better program-making by encouraging the growth of the individual kindergartner. Although the problem is being worked out by different methods in different cities, I believe that we all recognize so well the fallibility of our own judgment that for the present we are agreed amicably to disagree.

In addition to this tendency to make the work of the kindergarten more systematic and fruitful, a demand for a higher standard of order among the children is being made and met. Perhaps because the old systems of education over-emphasized law the kindergarten has had a tendency to over-emphasize freedom and to lose sight of the fact that one cannot exist without the

other. To-day we are being required to put into operation in more practical ways certain of the principles which we advocate. The great need of the kindergarten to-day is the development in training-school pupils and in kindergartners of the power to apply for themselves with ever-increasing clearness and effectiveness the principles which they have accepted in theory; so that they may be able not only to give reasons of their own for the faith that is in them but to show forth their faith by their works.

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### SCHOOL GARDENS.

MARGARET C. LAIDLAW, SUPERVISOR KINDERGARTENS,  
SOUTH DISTRICT, HARTFORD, CONN.

In the spring of 1902 the strip of land south of the Wadsworth Street School was cleared of several unsightly buildings and old fences.

The land was then filled in and leveled. Here the older boys of the neighborhood felt free to indulge in their ball games; and as the property lay between two streets, it became a thoroughfare for hundreds of people on their way to and from work.

The spring of 1903 found me casting longing eyes on this ground, as an ideal spot for children's gardens, to be a part of their school opportunity.

The cultivation of the soil in natural conditions, with real tools, and the planting or sowing of one's own garden, and a close observation of results, are profitable pleasures for even very young children.

Having obtained permission to use a part of the vacant space for gardens, I called the teachers together and explained the plan. A few were most sanguine; others would try it, but knew it would be impossible to grow anything in such poor soil, or keep anything in such a public place. We decided finally to make the attempt and with the valuable help of our principal the land was measured off and sixty beds 3x5 feet with good paths were planned.

A man was hired for the first digging. I watched the earth as it was turned over, clay in some places, broken brick, plaster and stones scattered throughout.

I was repeatedly advised to give it up as they told me nothing could possibly grow there. But how could I give it up with over a hundred children asking me at every turn, "When may we make our gardens?" or, "Are we going out to-day?"

The neighbors stood at their windows and watched proceedings. One came across the street to inquire what we were doing. She said it looked like a graveyard.

An old lady with a most puzzled expression was told we were making children's gardens. "Well, well," she said, "I've lived here forty years but I never saw the likes of that."

The children now came with spades and rakes, eager to work, and full of the enthusiasm so lacking in their elders.

They raked the brick, plaster and all other debris out of their beds, and carried it to the piles we had started as foundations for mounds. Later these were solidly built and set out with petunia plants, which gave us a profusion of blossoms all summer.

We had barn fertilizer brought and a portion put on each garden bed.

The children were out next day working this into the earth and in about two weeks the ground was ready for the seeds.

Lessons on seeds had previously been given in the class-rooms. How planted, whether in straight rows, hills or scattered and about different depths for different sized seeds.

The weeding, hoeing and watering, took up two or three hours a week and before school closed the children had taken home radishes, lettuce and petunia blossoms.

The Primary teachers became very much interested as the work progressed. They had taken their classes for a walk through the gardens about once a week and noted the growth and beauty of it all. "I wish we could have this privilege," said one. "Ask for it," I replied. "Oh! do you think we could have the ground and a man to do the first digging for us?" "I am sure of it," I answered.

Then came others, "Could we have gardens for these same children next year? They will know better how to go ahead and do the work themselves by that time."

As these requests came to our principal he willingly gave permission but feared adding another subject to take the time and strength of the Primary teacher.

In the fall the gardens were a revelation to all who had not seen them since June. The interest of the now-Primary children was good to see and they were able to share their surprises with the new Kindergarten children who entered into all the fall activities.

The corn had to be cut and stacked, potatoes dug, beans gathered and flowers picked and carried to the different rooms.

There were many seeds to collect and put away, leaves to rake up and bulbs to plant. We were able to bring into our Kindergartens, corn with stalk, root and all, and in many ways the talks and occupations of all the grades are helped by our garden and its nature teachings.

This year our garden space was extended and sections planned for four grades. It was such a joy to feel the enthusiasm of the Primary teachers, to hear their pleasant talks with their children and to join them in their happy anticipations.

Some of them planted seeds in their window boxes early in March, to be transplanted into the gardens later.

In one room the children saved their pennies to buy plants of salvia and verbena and the teachers studied catalogues and other sources to learn which seeds would grow best in the soil of the section assigned to them, when to plant, and how to care for them.

I wish to speak particularly of the splendid work of the Primary teachers who have done so much to make the gardens a success. With the many subjects of their school curriculum, they have given the time and energy, feeling the traditional work crowding, but realizing the many benefits of this outdoor effort.

A Primary teacher was asked if the children were harder to control after the freedom of the garden. "Not if I correlate," she answered. "They are so full of the work that a reading lesson about gardens gets better attention than some other subject might."



"The free-hand cutting of garden tools and of radishes that grew in our garden were especially well done; no doubt because so near to their interests."

Another teacher said, "I have understood and enjoyed my children better this year, and feel an improvement in my health over the closing weeks of other years."

The children worked the earth until ready for the seeds. We planted during the week beginning May 16.

Such a busy scene as it was. Many of the parents came and watched the work with evident pleasure. The teachers and older children at recess time forgot about any other recreation. The gardens were the chief interest to all.

The children's choice of seeds was very interesting. "I want to plant morning glories, as I am only here mornings to see them," said one little fellow. Another asked for radish seed because his mother liked radishes.

"I want lettuce seed, please," said one little four year old, with no explanation; but in the afternoon I overheard his brother say, "Percy sowed lettuce seed so that his rabbit could have lots of lettuce." Surely here was forethought.

Almost all children choose nasturtiums or sweet peas. The boys are anxious to plant pumpkin-seeds, with a jack o' lantern in mind.

It is not always possible to give entire freedom to the children in their choice of seeds. We plan to give symmetry and order to the garden as a whole, and this adds materially to the educative value of the work.

We have a large crescent shaped bed, and that with



the flowers along the fence and the mounds, give opportunity for general care and co-operative work to quick children.

We have golden-glow, sunflowers, corn, beans and tall flowers in the beds farthest back, the low growing flowers and vegetables in front.

This year, with individual gardens, each child has planted two vegetables and two flowers. One vegetable that matures above and one below the ground, as lettuce and radish, beets and beans.

The vegetables made an early showing. We had fine radishes June sixth, with beans and peas in blossom soon after. The flowers come more slowly, but are in their prime in the fall.

During the summer our janitor and a number of helpers have offered to take care of the gardens.

The children know that they can come Saturday mornings, do any necessary work in their garden and take home anything that is ready.

The closing week of school the parents were invited to visit the kindergarten.

We were delighted to notice their interest in every son, and game, and piece of work, but the gardens! Why, some of the mothers, when they found which was Helen's or Willie's plot, got down and began pulling weeds and instructing the children about transplanting where the plants were crowded.

Several mothers have brought their cameras and taken pictures in the garden.

The neighbors say they cannot work while the children are in the garden, it is such a temptation to watch them.

People have stopped while passing to tell us what

a pleasure the gardens are to them on their way back and forth and liken it to a park with its shrubbery, green grass and spreading elm trees.

Even the rubbish heap where we hid a great many seeds is now a green mound with sunflowers, beans, morning glories and gourds in friendly proximity. We have taught the children, that through their personal efforts unsightly places can be made beautiful.

The home interest is very encouraging. One father sent some rose-bush cuttings that are growing nicely.

Tools and seeds have been inquired about and bulbs and seedlings of different kinds brought to us.

I have noticed great improvement in many back yards that heretofore have been neglected.

Several of our interested children having no yard coaxed for boxes on their porches where they planted seeds with splendid results, and in other ways show an appreciation and enjoyment of nature's blessings.

Many lessons have been quietly taught of helpfulness, self-reliance, unselfishness and respect of others' rights.

In the early evening, friends and neighbors walk carefully up and down the paths, commenting on the different things and showing a real interest in their growth.

Very little damage has ever been done and very few things taken. And this in the face of the fact, that our garden is on the line of travel from street to street, the school itself but two short blocks from our main street and in a district where there are over three thousand children within five blocks.

## OUT-OF-DOOR LIFE FOR CHILDREN.

MRS. SUSAN S. HARRIMAN, TRAINING SCHOOL,  
BOSTON.

The development of a new type of American characterized by restlessness, nervousness and frailty of constitution, sadly at variance with the poise, serenity and strength of former generations, makes it imperative that children should be kept in close touch with Nature. Wealthy people have their large estates where their children may spend every season of the year out of doors. A return to the ancestral home or a modest camp by some lake is possible for those of lesser means while for the poor there are colonies which provide the same benefits in less attractive form. The settlements and churches of our large cities send many children to the country in search of red cheeks and sturdy limbs, and yet only a fraction of a city's population can be reached in this way. The majority of the children must spend the whole year in crowded tenements with only the streets for a play-ground. In New York City last year less than one hundred single houses were erected, which means that the huge population of the city lives in apartments and tenements.

Some there are who see the danger of such conditions, not only to the individual, but to the nation. These are the men and women who, having the courage of their convictions seek to improve existing conditions. What should be the part of the Kindergarten in the good work? It would be interesting to know the feeling of Froebel if he should return to earth to

visit our American Kindergarten. He probably never dreamed of such splendid buildings and equipments, but what would be his feelings as he gazed upon the few puny straggling plants which struggle as best they may, amid unfavorable conditions, to crown with success the attempts of an earnest Kindergartener to show her children the beauty of plant life. What if he looked from the window to see only brick wall! Would he not think that we in America must be using a carefully expurgated edition of his *Education of Man*; one from which every reference to garden and plant life had been omitted? In saying this I would not seem to undervalue what is done in the Kindergarten. Many are the flowers carried there, and much happiness results, but Froebel intended a wider happiness. What does the child learn from a bunch of roses? They are red and pretty and smell sweet, but he does not know how they grow nor where, and they bear but little relation to him. Froebel meant that a child should see roses grow, watch for the first leaf, soften the earth—water it; exult in the first bud and gather the full blown rose. Here would be a process watched and a truth grasped; a spirit of nurture and a communion with Nature. A child should know the joy of wading in deep grass, of racing down a grassy hillside and of resting in the shade of trees while watching clouds sail by. We believe in physical, mental, moral and spiritual development; and what offers all this more freely than out-of-door life.

And once convinced of the need of such life, how may we provide it? A Kindergarten is started in some town along most simple lines. Some day a piano is needed—and provided. Later an assistant is needed—

and provided. Now a garden is needed—why should it not be provided?

Why not gardens in our growing systems of parks within walking distance of some Kindergartens, or in our smaller parks and vacant lots? But let us desire this good thing with all our hearts and we are promised from on high that "The desire of the righteous shall be granted." What more righteous than a work in behalf of children?

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#### THE KINDERGARTEN OUT-OF-DOORS.

FLORENCE E. SCOTT, NORMAL SCHOOL, FITCHBURG,  
MASS.,

"And what would all the beauty be  
And what the song that cheers,  
Suppose we hadn't any eyes  
And suppose we hadn't ears!"

It is of an experiment with the children of my kindergarten that I have been asked to talk simply and briefly: a definite effort to lead them to know and to love Nature at first hand, through eyes and ears and heart. It is not enough to say to very little people,

"Come forth into the light of things  
Let Nature be your teacher,"

and to give them perfect freedom in the open air to learn their delightful lessons. For while Nature gathers them on her knee and teaches them truths in the subtlest, wisest way, with a cunning man can only

try to imitate, she usually needs an interpreter. That at least is my personal conviction based on the experiences of my own childhood and youth.

She can only smile and nod and beckon and to eager curiosity silently reply, "Search out my hidden secrets,"—yet eager curiosity *unsatisfied* may become indifference. And to the dormant mind unmoved by song of bird, odor of flower, or rift of light she may not come with earthquake power to startle into attention the sleeping senses.

She must wait, and one must come with the spoken word and delicate touch to bring hearing to unawakened ears and beauty to eyes that seeing, see not.

It is in this delightful relation to the children and to Nature that all teachers may stand.

To secure it the first step is *belief* in the necessity of *Nature-love*, and a devotion of heart and intellect to the opportunity offered the interpreter. I place *heart* first advisedly, for the teacher with a great love for Nature may inspire that love in the hearts of others even if he has but little scientific knowledge of birds and trees and flowers. And his teaching is safe because where love goes the mind will follow.

Believing that we receive from things largely what we bring to them, I began my definite work with the children by encouraging them to become very familiar with the birds represented on the schoolroom chart,—their names, appearance, and songs as given by good authorities—that they might be ready to recognize them quickly by and by in fields and woods.

At length, on March 23, we were rewarded by seeing our first bluebird,—and a flock of crows. At the suggestion of one of the little people we sang with

great appreciation that charming bit from Neidlinger's Small Songs for Small Singers,

"Pretty little bluebird, why do you go?  
Come back, come back to me."

"I go," sang the bird as he flew on high,  
"To see if my color matches the sky."

On another day a small flock of bluebirds were haunting a cluster of white birches on the hill near us, and as they sang on unafraid and the bright sunlight brought out the color of breast and head and back, my clumsiest boy, my boy with perpetual evidence of close contact with Mother Earth, the one whose environment suggested least the cultivation of the æsthetic,—*he* came close to me and with pointed finger and illumined face, whispered hoarsely his discovery, "*He's got a blue cap on!*" Then I knew that Nature had found that boy's *soul* and thereafter a new refining element would influence his development. And I could not imagine that in place of the love and tenderness that lighted his face would ever come the hard and cruel expression of the boy who stones and kills birds.

These incidents may serve to show how a real love for the birds is inspired and how our songs and poems of Nature help in the everyday interpretations.

Our method is to take the children directly into the fields and woods—which our location at Fitchburg makes possible—placing some of them in small groups in charge of kindergarten students for individual guidance in observation. It is almost impossible for a group of forty-five children to see and hear at close



range any but the most common birds, but a group of eight or ten may approach the thicket where the brown thrasher sings and hear an uninterrupted solo of ten minutes' length; or watch the mother robin make frequent trips to her nest at feeding time.

Occasionally, however, we take an excursion all together: to Fallulah Brook in the valley, to Frog Pond near "Chippy Hollow," to our neighbor's rabbit pen, to a hen yard where little ducklings, goslings, and chickens swim or scratch about according to inherited tendencies.

And we are free to accept all such invitations,—for first, last, and all the time we are to be an out-of-doors kindergarten seeking perfect health in the open air and gleaming as we may all broadening knowledge. For so may we lay the foundation for "complete living," through physical, mental, and spiritual nurture.

As we go and come, play attracts us: we attempt a rude see-saw, we chase our own shadows, we dig in a sand bank, we improvise a bridge, we "play horse." The flowers beckon us into the fields, by woodpath, and roadside, and the shaded hillside tempts us to rest.

And so by the middle of June we have seen 24 different birds and have had 65 different flowers in kindergarten, all listed on the blackboard.

We believe that a real and lasting love for the birds and flowers has been inspired while at the same time the habit of definite observation is formed. Thereafter to see every flower, to identify every bird is part of the pleasure of all excursions with parents and friends as well as teachers, and the result is an awakened interest in Nature Study in the families and friends of the kindergarten pupils besides the grand



start which the children themselves make in physical, mental, and spiritual development, in actual seeing, hearing, and knowing, in God's out-of-door world.

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### KINDERGARTEN WORK IN MUSIC.

MARGARET C. SEAVER, BOSTON.

The American speaking voice is much criticised for its harsh and nasal quality. This is due to the lack of proper use of the vocal organs, and no doubt because of improper training or lack of training when young.

A certain Dr. Fillebrown, a nose and throat specialist, who realizing these faults has set forth a simple method by which the quality of the speaking voice may be improved. This method is of a nature so simple, it is possible to begin the training of the young children in the kindergarten. Reforms of the race can only rightly begin with the children, and proper attention to the training of the young voice will surely improve the mature voice.

It is this method which we have used in our kindergarten that I am about to **explain**.

The main faults in the ordinary voice are: the neglect of sufficient use of the resonant cavities in the front part of the head, and also, the lack of free passage of sound through the nose.

We often hear the criticism: he talks through his nose. It is not so, it is because he does *not* talk through his nose, for if you will press your nose and

talk, you will get that nasal quality and prove the fact.

The proper use of the vocal organs constitutes this method and resolves itself into three exercises: those of the lips, for the resonant; chambers of the tongue, for clear articulation; and of the throat for magnifying the sound.

To begin with the lips: The word "sing" will always put the voice in proper focus. This should be done with the head up, the lips well extended and under jaw projecting, and said in a singing voice on the pitch of *g*. The "ng" of the word "sing" closes the throat and the tone is sent vibrating through the head cavities which are increased by the extended lips and jaw.

Illustrate—

*"sing"*

This may be said several times to establish the focus. Then with this position to insure the vowel sounds taking proper course through the nasal passages, follow the word "sing" with the sounds, *e — o — oo — aw — ah*.

Illustrate—

*"sing e" "sing o" "sing oo"*

*"sing aw" "sing ah"*

*"sing e — o — oo — aw — ah —"*

The exercises for the proper use of the tongue and lips for articulation, these same vowel sounds are used but with the prefix "T." With the same position, as for "sing" in the same way say *tee—to—too—taw—tah*—with great freedom of the lips. During the exercises return often to the word "sing" to be sure of the focus.

Illustrate—

“sing—sing” “tee” “to” “too” “taw” “tah”

Then those exercises to enlarge the throat and magnify the sound, the word “sung” may be used as the word “sing” in the previous exercise. The “ung” enlarges the throat; then let the same vowel sounds pass through the nose.

Illustrate — “sing” “sung e” “sung o” “sung oo”  
“sung aw” “sung ah”

“sung e—o—oo—aw—ah”

To summarize we have first, the word “sing” with vowel sounds for a resonant quality; second, “tee” and vowel sounds for clear articulation; third, “sung” and vowel sounds for depth and richness.

In bare statement of fact this is Dr. Fillebrown's method, his theory and exercises, and they form the foundation on which we have based the exercises used in our kindergarten.

The repetition of these exercises would be most uninteresting for the children and without their interest we know nothing could be accomplished. To make this feature interesting and gain their attention, the Mother Goose Rhymes, Stevenson's Child's Garden of Verse and other similar rhymes with which we wish the children to be familiar, may be used to this effect. After a simple preliminary drill always with the word “sing” (“sung” and “tee” later as the exercises progress) follow with some familiar rhyme said in the monotone singing voice in the same manner as the word “sing.”

That is, first properly pitch the voice with “sing,” then repeat the rhyme.

Illustrate—"sing e — o — oo — aw — ah"

"Hickory, dickory, dock, etc."

Repeat others in the speaking voice for articulation. As a little point of interest let individual children try, and in that way each child may receive special attention and have the experience of speaking clearly and quietly.

Like all other things begun in the kindergarten we do not look for results, so when the children are playing or on the street and harsh piercing voices greet our ears we are the more forcibly impressed with the great need of early voice culture.

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### KINDERGARTEN WORK IN ART.

ANNA M. DEVEREAUX, NORMAL SCHOOL, LOWELL, MASS.

[Editorial.]

Miss Devereaux spoke of the many opportunities available to kindergartens that would aid them in the arrangement of all the occupations for a more artistic effect. She then explained the system of definite "Art Work" used in the Lowell kindergartens and showed charts on which were mounted samples of the children's work in designing and painting.

## KINDERGARTEN WORK IN ART.

ADELINE T. JOYCE, BROOKLINE, MASS.

During the last decade there has been an awakened appreciation of the rôle which art should play in life. Our World's Fairs have taught us much of the beauty of massed effects, and our Mr. Olmsted has shown us truly that the "wilderness may blossom as the rose." Yet side by side with this consideration of beauty and its proper setting, there is steadily creeping into our civilization vulgar commercialism which seeks only for gain, and we have the gaudy bill posters, the lurid newspapers full of their gross cartoons. These form the only picture world to hosts of children. What is the realm of knowledge that such pictures open to them, and what is their influence? We must inevitably answer that these are negative influences which stunt and dwarf any finer sensibilities and tend only to destruction.

Is it not then the duty of the educator to step in and take such children by the hand and lead them into "green pastures and beside the still waters?"

This, I believe, is the privilege of every honest Kindergarten—to lead her children early to know and appreciate something better in the field of art.

Alas, Josephine Durham's Ardelia from the slums of New York is not an unusual type of child. There are hundreds and thousands of children in our large cities being fed upon just such nauseating environment as that in which she reveled.

*We* might have been such had it not been for environment, and that through our environment our eyes

were opened and we saw. But to my subject. Have you ever thought how much we owe our great artists apart from the pleasure we derive from their pictures? Are they not discoverers, revealers to us ordinary mortals of hidden beauty?

It is they who first showed us on canvas the blue violet lights, the beauty not only of sunshine but of shadow, the harmony not only of mountain and sea, but of sand dunes and marshes.

As we study their pictures and look through the eyes of these wise and clever revealers of our world, do we see at first in miniature this beauty, and by degrees we get their point of vision. So in a sense each teacher must be an artist. She must know and feel these things for herself, if she is to lead her children into the world of color. *Take* the children into the presence of the beautiful. A little girl whispered in awe, as she came to the grand staircase of the Boston Public Library, "Mother, is this God's house?"

Again, lead the children to notice and comment upon the varying aspects of nature,—the soft greens of spring, the rich browns of fall, and the purples, blues and whites of winter. For children love color. But an affected talk about "the gloriousness of color" is futile unless backed by experience.

Does not the sight of the dandelion, the tulip, the apple blossoms, and the lilacs cause your pulses to quicken and your hearts to leap with joy? Give to your children these experiences.

In addition to taking the children into the presence of the beautiful, we must make our rooms attractive and harmonious.

We have a great mission to perform in this direc-

tion, not only as an elevating influence upon the children, but as we were, I believe, pioneers in school decorations, so we should strive always to keep a very high standard. Let us simplify our rooms by eliminating a lot of claptrap and meaningless dust collectors, and by classifying and keeping in order our decorations. Have a rotary system of decorations, taking down and replacing, leaving but a few vital things before the children. Above all have something really beautiful ever in their presence.

For this purpose nothing can exceed the beauty of well stocked window boxes.

The practical work of the children in art in the kindergarten must of necessity be elementary, but for that reason it need not be ugly. Simplicity must characterize our work, but pleasing results may be obtained through repetition and the use of clear color.

By doing we become, and so by doing, the child acquires knowledge. For, as Miss Williams told us at Rochester, there must be more of an "acting out than pouring in" with little children.

By reproducing from life some simple flower, the child enters into a closer relation with that flower than he could through months of hearsay. The simple stroke work on narrow strips of paper, and the laying on of the brush, are absolutely legitimate work for kindergarten children, and lead to attractive nature work. I should speak of results, but instead I have left a blank, for results are not in our hands. If, however, by our art work we have led even a little child through the gates and into the world beautiful, then indeed we have accomplished much.



## THE KINDERGARTEN PROBLEM IN NEW ENGLAND.

CILES A. STUART, SUPERINTENDENT OF SCHOOLS, NEW BRITAIN, CONN.

[EDITORIAL.]

Mr. Stuart was chairman of a committee appointed by the New England Superintendents' Association, one year ago, to report on the Kindergarten. Associated with him were Miss McConkey of Springfield, Miss Brown of Bangor, and Miss Haywood of Brockton. The committee divided the work into:—Kindergarten from the Primary Teachers' Standpoint, Mothers' Meetings, New Material and New Work as Manual Training, Domestic Science, etc., Qualifications of Teachers, and Financial Question. Each sent from thirty to seventy-five letters to Kindergarten, Primary and Grammar School Teachers, Superintendents, High School and College Men, including College Presidents.

The conclusions were as follows:

1. No one should be permitted to engage in Kindergarten work unless she has the equivalent of a High School, regular four year course beyond the ninth grade, and a two years' training in Kindergarten work; still better if some of the College graduates would come in the same as they are doing in the grades.
2. There is too much conservatism, unwillingness to believe anything has been discovered since Froebel died—slavery to Froebelian system.



3. Too many physically weak are attracted to the Kindergarten because of its half-day of service.
4. Too little interest in education as a whole.
5. More independence is needed—not afraid to speak their minds against those who say “stand pat.”
6. Kindergarten age from four to six.
7. There should be a Kindergarten in every school.
8. Interest educated people for more money.
9. Two sessions not same length as primary—one-half children in the morning and the other half in the afternoon, thus giving more time to do real Kindergarten work.
10. Greater co-operation between Kindergarten and grades.
11. More attention given to hygiene, manual training and some of the advanced work.
12. It seems doubtful whether it is wise to try much basket weaving, raffia work or cooking.

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## DEPARTMENT OF ELEMENTARY SCHOOLS.

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### ESSENTIALS OF AN ELEMENTARY COURSE OF STUDY.

CHARLES H. DEMPSEY, SUPERINTENDENT OF SCHOOLS,  
ST. JOHNSBURY, VT.

In dealing with the subject assigned me—the Elementary Course of Study—I beg to submit to you the consensus of opinion of a considerable number of educators, to whom I desire here to acknowledge my indebtedness.

As the course of study is simply an outline of the education of the child, it must stand the tests applied to the value of education itself. Hence the vital elements of our course of study are the vital elements of education. Here is a clear starting-point, and a common basis for discussion. With this conception more or less clearly in mind, I find a general agreement upon the following broad divisions.

I. The course of study must provide a usable body of knowledge. As education is "preparation for complete living," it must be composed of those subjects and parts of subjects that the pupil can use for the development of his knowledge, his appreciation of good things, and his several powers. No non-essential fact, therefore, in any subject, no matter how interesting or curious it may be, can be called a *vital* element. Every subject, both in its own development and in its utility for life, shows certain essential and indispensable parts. These are the vital elements about which are clustered all the host of single facts, applications, principles and the like, which give life and interest to the outline.

II. A second essential is the provision for the discipline of the intellect and for the development of the powers of sense, thought and action.

From a pedagogical point of view this is perhaps the severest test of the value of a course of study. It demands, for example, that the arrangement, sequence and relation of topics in Geography, Grammar or Nature Study shall conform to the laws of thought and reason, that they shall furnish for the mind fresh material that will fall naturally into its proper place, that they shall compel original thinking and personal ac-

tivity, and that they shall lead the child clearly and straight toward desirable ends.

Those subjects or parts of subjects must be emphasized which will open the eyes and ears, and lead teachers as well as pupils "to see and understand men and things as they are to-day."

Beyond the intellect and the senses other activities of the human being must be cared for in a well-constructed course of study, chief among which are the hand—through drawing, writing and such manual training as is possible—and the voice—through music and proper oral reading and recitations.

In short, if the course fails to contain such features as shall make the student keen in observation and perception, methodical and masterful in intellectual habits, and capable in expression through physical activities, it lacks some most vital elements.

III. A third essential is adaptability to local needs and conditions. Manifestly an outline for a system of graded city schools with well paid and trained teachers would be a sad misfit for rural communities with limited equipment and means. It should, however, be remembered that the interpretation of this demand upon the course of study should be so broad, progressive and modern, that the school shall not suffer in its service to humanity nor in the value of its ideals.

IV. Another feature of a good outline is that it provides the means for producing culture and good expression in the use of language. These come as a matter of course, if the other vital elements are present; yet definite provision should be made to secure this end, and we may look for it chiefly in Reading . . .

(including Literature), then in History, Geography and Language (Composition).

V. Closely connected with this essential is another that is perhaps more an aim of good teaching and school management,—the moral element. In the course of study it appears more as a subtle modifying influence acting upon the whole, rather than as a distinct part, save as it may appear under the heading of Moral Instruction and possibly Memory Gems.

The force of this element is to drive home the principles of right and truth, to belittle and discard the wrong and false, and more and more to train the heart.

VI. The last vital element to which I would call your attention is rational co-ordination of work to avoid waste of time and energy and to promote unity. The report of the Committee of Fifteen (1895) upon this subject still remains the best treatment of the subject we have. Dr. Balliet says in this connection, "What we need in most school systems more than a reduction in the number of subjects taught is a proper conception of their unity, and a rational co-ordination in the work of instruction. Nature Study should not be a study of each of the natural sciences as such, and it should be made to contribute largely to the fund of material for use in oral and written language work, which, also, includes not only composition and grammar, but reading, writing and spelling; civil government is but a sub-division of history, and history cannot be taught independently of its relation to geography; and the elements of book-keeping and something of geometry have long been taught as a part of the instruction given to advanced classes in arithmetic."

To summarize briefly, we have these six vital elements—principles, one might call them—of an elementary course of study:

I. Essential and usable knowledge, logically developed.

II. Discipline of the intellect and development of personal powers.

III. Adaptability to local needs and conditions—usability.

IV. Provision for culture and good expression.

V. Moral influence or heart training.

VI. Correlation of subjects and unity.

Coming to the application of these fundamentals to the material composing the course of study, we find a wide divergence of opinion and a great difference of usage. Uniformity is hardly to be found, yet certain things may be reasonably demanded in emphasis, choice and treatment of subjects.

In the whole list of studies, old and new, Reading, Writing and Arithmetic are pre-eminently the most important, and of these Reading—taken in its broad sense—is the greatest. One authority regards the course of study simply as an extension of this subject. An educated man is frequently referred to as a well-read man. The course of reading must include:—1st, a good method of primary and intermediate instruction; 2nd, a predominance of good literature adapted to the comprehension of the child, and chosen with respect to the interest, culture and moral principles it may arouse; 3rd, provision, by material and methods, for good voice and expression in upper grades—a widespread lack at present; 4th, the judicious arrangement of supplementary reading for in-

formation. Reading should have a place twice a day on the program for the first three years of school, and once daily for the rest of the elementary course.

The essentials of Writing are three;—a free, legible penmanship; a knowledge of forms and arrangement; and a good literary style, the last being practically the technical form of written composition, and this should naturally be closely associated with language work in all grades.

By common consent, nowadays, much of the little-used portions of Arithmetic is dropped from the elementary course, and emphasis is properly placed on accuracy, reasoning power and rapidity in the subjects most commonly used by the average person of good information and wide interests. The list of omissions given by Dr. McMurry in his paper read at Atlanta (February, 1904), would command general assent. Arithmetic should not receive especial emphasis the first year or two of school life, but later ranks as one of the chief studies in the curriculum.

After these three subjects the next in importance is Language—including Grammar. These fundamental principles regarding its treatment are well established.

1. Language work is the center of unity and correlation in the course of study.
2. The whole course must be planned so as to produce appreciation, command and habitual use of good English, attained more by practice and example than by rule and precept.
3. Technical grammar should be taught chiefly if not wholly in the upper grades of the grammar school, and must insure thoroughness in the ordinary con-

structions of English, omitting exceptions of little value and involved analysis, parsing and diagrams.

4. Composition work without a rich fund of information and thought is impossible, and grammar work without application and practice is dead. It is undeniable that our pupils gain but meager power of expression, resort to colloquial language of doubtful correctness immediately after leaving the school-room, and by no means form the habit even in school of using clear, correct English, whether talking or writing. Both teacher and pupil often look upon Language as a subject as distinct from all other subjects and from daily life as Latin or French.

The "new Geography" has hardly become crystallized yet to an extent that will render any detailed statement of its treatment safe, but it is evident that whatever the book or method used, the outline should aim to secure these ends:—

1st. To train the pupil to observe the facts of Geography about him, and reason from them.

2nd. To teach Geography comparatively, beginning with the home and extending the subject by the laboratory and topical methods.

3rd. To train the imagination, reason and memory.

4th. To emphasize the physical features of the earth; the distribution, character and uses of plants, animals and minerals; the land as divided into nations; the nature, activities and relations of these nations.

In history the rational course of study emphasizes the great movements of peace and progress and points out clearly the causes, course and results of wars without placing undue stress upon the details of battles and campaigns. It chooses epochs rather than inci-



dents, groups events about great movements and great men, traces growth and development, calls for training in good citizenship, and holds up worthy acts and noble men as ideals for our admiration and imitation.

The earlier teaching of History should be largely biographical and narrative, and in upper grades the subject is developed chronologically and logically, using topical and outline methods which call for the use of various books, pamphlets, magazines and other sources of information. The pupil is led to think and reason, not to memorize merely.

Geography and History must be made to supplement and enrich each other, and in this correlation History is the subordinate subject, necessarily so in other countries than our own, advisedly so in the United States, where familiarity with the complex conditions of its complete geography is so important.

In the outline of any subject, whether of these I have mentioned or of any other in the course of study, the same general principles must be applied, and those parts emphasized that have a close relation to the real needs of life, giving but slight attention to or omitting altogether those things that do not minister to the æsthetic, ethical, or practical needs of life, nor the thorough and best development of the child.

It is certain that these subjects,—the mother tongue, American citizenship, elementary science, nature study and various kinds of manual training—should receive more attention; and in general, “those subjects and arts which will best fit the multitude, who will never receive more than an elementary education, for the ordinary duties as well as the privileges of life.”

## THE RELATION OF PRACTICAL AGRICULTURE TO THE COURSE OF STUDY.

PRINCIPAL JOHN L. ALGER, JOHNSON, VT.

When John Ruskin said, "As the art of life is learned it will be found that all lovely things are also necessary," he crystallized into that one unforgettable sentence two fundamental principles of modern education which relate very directly to the topics under discussion here to-day.

Education is learning to live, to be sure, but it is learning to live by living. That which is lived most, educates most. In short, we are the product of what we feel most, think most, desire most, and strive for most. To create conditions under which the child may really feel, think, desire, and do, is the first step in that true education which Ruskin terms, "learning the art of life."

The value of systems of education must be measured by the degree to which they lay hold in a truly practical manner upon the real life of the real child, enlisting dominant interests, and stimulating self-activities at every point.

It is with this estimate of values constantly in mind that we shall consider the relation of practical agriculture to the elementary school course.

Very recent years have witnessed no more significant and far-reaching educational movement than the establishment of school gardens for the systematic study and practice of the simplest arts of agriculture. In spite of the fact that fifteen years ago gardens of

this type were virtually unknown in America, we now find them all along the line from Maine to California.

The history of the origin and progress of the school garden in our own country parallels in many respects the story of the introduction of the kindergarten here. Like the kindergarten the school garden is from imported seed, flourishing beyond expectation in our native soil, and creating new problems of nature and nurture. It is a curious circumstance that in all our borrowing from the educational systems of our friends across the sea, we have so long overlooked the fact that the school garden is there regarded as one of the most essential and valued features of educational experience.

The principles underlying school garden work are practically the same educational verities upon which the kindergarten is based. Indeed, out-of-door gardening was one of the important features in the theory and practice of the founders of the kindergarten, as well as of their successors in Germany. Its omission here has been deplored by the closest students of kindergarten philosophy, who point out that the wholesome conditions of a well wrought school garden conform more nearly to the true kindergarten ideal than does the artificial life of an over wrought, wholly indoor, kindergarten. It is also claimed by leaders in kindergarten thought, that the substitution of real work in a real garden among real plants, birds, and insects, for the typical and play work of the kindergarten, is a necessary step in the direction of saner methods and safer results.

Like the kindergarten, too, the school garden is modifying educational concepts and demands. It is

effectively overturning traditions and is measuring cherished courses of study by new standards. It is requiring from the school world at large, not rigid conformity, but intelligent adaptation and readjustment.

Like the kindergarten, again, the school garden has evidently come to stay. When we look at it squarely in the face we see that the fact of the school garden is after all its only really new feature, for we have long treasured its spirit in our more familiar nature study movement. Without doubt the finest result of all the nature study work is that it has taken the children of our land out of doors, and if it has led them to the school garden, so much the better.

But it is not my purpose to dwell on these already well understood actualities and possibilities of gardening. The phase of the subject which claims consideration at this point is just how the larger educational values of gardening articulate with the elementary system. Gardening is certainly vastly more than applied botany, practical arithmetic, and so on. Its chief value lies in the opportunity it creates for intelligent and intense self-activity. Granting this as one of its strongest features, it is evident that the subject of practical agriculture, broadly interpreted, must properly be considered as a form of manual training. It is this aspect which I desire to emphasize.

Manual training from its direct connection with life and with the arts of life, so enriches our curriculum of text-book studies as to give it a real point of contact with every-day living and loving and laboring. Incidentally it includes the training of the hand, the

training of the eye, the training of the mind, and the training of the heart.

In the old days the whole range of farm duties, from breaking steers to making soap, added to the education of learning the art of life by living. When we see the great number of men and women who have risen through this homely toil to leadership, we are led irresistibly to the conclusion that modern life with its freedom from these very elements which have brought success to the older generation, must be supplemented in some way, even in the rural communities, if we are to enjoy the advantages that our fathers gained from this essential and practical training. Manual training is a necessity for our schools. The question we have to answer is not, Shall we have manual training? It is rather, What form of manual training shall we choose?

Is it settled that sloyd, or iron working, or sewing, or cooking, supplies ideal conditions for learning the art of life? The more we consider the possibilities and limitations of any of these forms of manual training, the more objections we shall find to each if we are to attempt to use it as a fixed type.

Agreed that the basis for the selection of the forms of manual training to be used must be educational rather than merely economic or utilitarian, but we may find that that which is economic or utilitarian may sometimes for this very reason be educational in the best sense. The fact that the knowledge or the skill gained in any form of manual training will be useful in the future, is not of itself a sufficient reason for selecting that particular form of training, and yet this usefulness frequently furnishes a great stimulus to the necessary interest.

Again, our manual training must be practical. It must lead to ends that are desirable in themselves.

Our manual training must give keenness of observation; it must give ability to perform a definite task according to specific oral or written directions; it must present abundant opportunity for drawing conclusions from the child's own observations; it must afford physical training and relaxation from purely mental effort; it must involve healthful labor, pleasant thoughts, and kindly motives. It must allow full play to the creative powers, and that creativeness must admit artistic expression.

It is not difficult to prove that practical agriculture supplies very many of the conditions of an all-around manual training.

First, it is broadly educational. If it is not questioned that nature study through interest in life and the interrelation of its different forms develops mental power, then it is plainly evident that the opportunity for such development is increased when presented in connection with the vital interest and practical work of the school garden.

As for training in keenness of observation and in reasoning power, there is no subject which supplies more favorable conditions than agriculture, with its multitude of varying phenomena, its ready response to simple laws, and its innumerable unsolved problems.

The knowledge acquired in the garden is also well worth while, and covers a wide range of subjects. We may study there at first hand: the soil, its origin, tillage, moisture; the importance of drainage; how the soil may be impoverished; the origin and nature of the commercial fertilizers; how the plant feeds upon



the soil; the value of rotation of crops; how the plant feeds from the air; the sap current; the flower and seed, pollination, crosses, propagation by buds, selecting the seed, seed vitality; weeds; how to raise a fruit tree, grafting, budding, planting, pruning; diseases of plants; insects; birds; farm crops; domestic animals; farm economy; etc.

Agriculture is not only one of the best educational subjects available, but there is an immeasurable need for definite instruction in city and country along these very important lines.

Again, the teaching of agriculture in our schools is practical. We ask for enormously expensive equipments and laboratories for teaching the natural sciences in-doors, while land and seeds and the necessary labor would cost a trifling sum in comparison, and the land may usually be very easily found.

The teaching of agriculture involves healthful, out-of-door labor, pleasant thoughts, and kindly motives. It stimulates to a continuance of this labor outside of school hours, and it adds to the resources for happiness after school years. The garden becomes a delight instead of a place for drudgery.

But its finest field lies in its adaptability to the individual expression of the child's creative powers. He can design and make a box or a sled or a tool just as he can plan and make his garden; he can perform the experiments of the laboratory just as he can conduct his experiments with soils and fertilizers and crosses and selection of seed; but in the garden, where he is setting into continuous play the forces of life itself, there is a creativeness beyond his own.

Finally, our work in agriculture may have artistic



expression. The artist is the man who does the common thing in an uncommon way because of the delight that comes to his soul from the labor of doing well and for the happiness of others the thing that he has to do. It will be well for us when there is more of such art in the homes of our land. Its results are beautiful, whether in the painted picture, or in the stately edifice, or in the humble garden of the poor. Intelligent effort directed to the beautifying of the common things and of the common toil may do for our race what all the sharpness and shrewdness of the mental gymnasium could not do, in making an education mean contentment and happiness rather than a mere striving for the top.

To live intelligently and usefully is an art. To live intelligently, usefully, happily, and hopefully is the supreme art. When we discover that in learning this art all lovely things are also necessary, we shall gather from our school garden its finest fruits. We shall with greater wisdom bring into our school life less of the formal and purely disciplinary, and more of the training that tends to a higher culture, more generous thoughts, and to a finer realization of our noblest aspirations.

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### SUBJECTS, ARTS AND COURSES FOR COMMON SCHOOLS.

CELESTE E. BUSH, NIAHTIC, CONN.

Of the subjects that specially concern the profession of teaching, two,—courses of study and school economy,—bear upon my topic, and we shall gain a clear

field sooner by discussing the second before the first. How is the "common," or "ungraded," or "rural," or "district" school differentiated from that of the city? As a "district" it probably has narrow interests, and a slender support; as "rural" it has probably suffered from the social and industrial conditions that have borne so heavily on agricultural communities within the past fifty years; "ungraded" usually means taught under a poor system and by cheap and inefficient teachers.

But these poorly-supported, isolated, inefficient schools are, beyond others, the reliance of the nation since no people was ever strong without a strong, intelligent rural population.

The rural town, with its scanty means and sparse population, can never give its children schools equal to those of rich and populous towns; nor should it be expected to do so, since the State is the responsible unit in education and the State should therefore see to it that all its towns maintain good schools.

Given such aid and supervision by the State as will secure equal educational rights in all the towns, how shall we plan courses of study suited to rural schools?

The value of an education, or of a life, lies in the worth of the ideas formed and the force and accuracy with which those ideas are expressed. The ideas that are of most worth come from the common things of life,—food, clothing, shelter for the body; human companionship, ordered freedom, and wholesome pleasure for the mind. Courses of study should be based on these ideas and expression for them found in the practise of fine or useful arts under the direction of competent teachers.

For the equipment of a system of schools there is needed, besides the existing plant of school children, funds, houses, and officials, *first*, a body of educators; *second*, libraries; *third*, laboratories.

The educators should consist of supervisors, licensed teachers, and pupil teachers in training. For the training of supervisors there ought to be post-graduate courses at the universities parallel with those in law, medicine, and theology. Normal schools already provide for the training of teachers, but each pupil teacher ought to have a probationary course before receiving a license to teach. Libraries hold for us the world's store of knowledge and experience and a library, well chosen if not large, is indispensable to a good school. A laboratory is anything that offers an opportunity to work out or show out our ideas: it may be no more than a square yard of garden, or a bench of tools or collection of food or textile materials. A rural school may not be able to collect so large a library as its city sister, but its laboratory can be better, for the whole environment is a laboratory.

Given a body of competent and well-organized educators, properly housed and equipped with libraries and laboratories and there is no difficulty in grading rural schools effectively from kindergarten through a high school course and in shaping their courses of study along the lines of ideas of the most worth. The good old "three R's" are not so much subject matter as *tools* of education which any normal child of ten should be able to use with facility. So many and so valuable are the subjects that can be concentrated within the limits of geography that a pretty complete education might be given through this course alone.

History should begin in the kindergarten with Bible stories, myths, and folk tales and only end with the high school, concentrating literature, civics, and oral reading. Arithmetic, weeded of useless matter, offers opportunities for simple surveying, land and other measurements, common book-keeping and accounts, and the simpler problems of algebra and geometry. No more than a year is needed for English grammar if it is not begun too early, and that study may carry rhetoric and the rudiments of Latin. The school life itself should be a constant object lesson in civics. These simplified courses of study leave time and strength for learning and practising the useful arts, sewing, cooking, use of tools and many another which many pupils must learn in school if at all.

If it is true that there is no self-government by an ignorant people; and that a strong, intelligent rural population is the dependence of every nation: then to the teachers of the "common" schools, beyond any other class of persons, is entrusted the defence of this Republic.

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## IMPROVEMENT OF SCHOOL EDUCATION IN RURAL COMMUNITIES.

G. T. FLETCHER, STATE BOARD OF EDUCATION, NORTH-  
AMPTON, MASS.

The country town has been and must continue to be an important influence in national life. Seventy-five years ago New England towns were largely rural communities, the occupation of the people mainly agricul-

tural, life simple and sturdy, the people intelligent, industrious, prosperous.

The district schools were generally under the management of intelligent school committees who employed the best teachers available. These schools furnished opportunities for securing a practical education and, with the influence of a home industry and frugality, worthy citizens were trained. In recent years there has been an exodus of the people from the country towns to the cities and manufacturing centers, causing a serious loss to rural communities in population and property valuation; the schools as a natural result suffering in number of pupils, interest, and efficiency, while the schools in the cities and larger towns were improving. Consolidation of schools by conveyance of pupils to convenient points has proved to be an advantage in many cases. But the plan is not always feasible in towns of large area, scattered population, poor roads, and severe winters. The country town must become more prosperous financially, before much improvement can be made in its schools. There are encouraging signs of better times in many rural communities. Improved methods of farming, the higher prices of products, the purchase of abandoned farms by men of wealth for investment and improvement, the coming of summer visitors, add to the valuation of the towns and to the income of the people. A more important influence in the growth of country towns is the coming of people to make homes for themselves and their children. When the number of children increase, good schools will be provided. The coming of new people to take the waste places will bring life into towns that have been in a state of de-

cadence for years. Good schools are a means and a result of general improvement in a town.

The State must aid the needy towns, financially, in the employment of well-qualified teachers and skilled superintendents of schools. This is done most justly and generously in Massachusetts, and as a result there has been great improvement in the schools.

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## THE ADVANTAGES OF THE RURAL SCHOOL.

PRINCIPAL W. A. BEEBE, MORRISVILLE, VT.

A consideration of the advantages of any line of activity necessitates a comparison of it with some other system more or less closely related in purpose or nature.

So, in discussing the topic before us, we must ask with what is the comparison to be made. In answer to our question there rise, in vision before us, the modern city school building with its admirable equipment and the simple rural school house whither, for a few months in the year, the youth from the country round will wend their way, there to read, to cipher, and to spell. Surely, we are prone to say, there is no way in which this mere out-post of study can surpass in effectiveness that arsenal of learning which adorns the city street. But experience bids us, be not hasty in judgment; not all the gold, with which Mother Earth has stored her pockets, glitters to the eye of inattentive man. "Life does not consist in the abundance of things which we possess," and

"It is not always to those of the greatest show,  
To whom for a favor 'tis best to go."

Possibly among these unpromising surroundings, opportunities may be found which the artificial conditions of the city cannot equal. It is not our purpose to detract from the rightful appreciation of the city school nor shall we attempt to suggest the ultimate solution of the rural school problem, but we wish simply to point out some of the reasons why those of us who are struggling with the difficulties, which the country school presents, may take courage and, with new resolve, determine to make the weeks spent in the meager country school house a means for the development of a noble manhood and womanhood in the rural population of the rising generation.

The country school has a noble heritage. There must be some reason for this success in the past and, if conditions are now similar, we may still hope for like results. In any undertaking, one of the most potent factors of success is an advantage of position. The position of the rural school is such that Nature co-operates with teacher to develop the best qualities of youthful life. The city child must ever study Nature at great disadvantage. Books will prove a help, thoughtful teachers can supplement these in part, school gardens may arouse admiration, even awaken love for the leaf-clad children of the soil; but one must live in the country; must feel the dews of evening and watch "the stars, their silent vigils keeping;" must listen to the song of the lark as, "from his watch tower in the sky, he heralds the return of day," and on the leaves nodding in their noonday nap, if he



would hold "communion with Nature in her visible forms." In youth, the powers of observation and imagination are most active. The children of the country are in touch with Nature at every point. Their earliest and most valuable lessons may be received at first hand. Guided by thoughtful questions they will gladly learn ;

"Of the wild bees' morning chase,  
Of the wild flowers' time and place,  
Where the ground nut trails its vine,  
And the wood-grapes' clusters shine."

The power to compare, to generalize, and to draw rightful conclusions will follow as a natural consequence and when the boys and girls go forth to battle with the difficulties of life they will have stouter hearts since they were tempered in the furnace of resistance.

Habits of industry are best formed in the country. The city has its busy stir, its din of motion, but it is in larger measure meaningless. We can trace but a small portion of any activity and can but feebly guess its purpose. How different is the work of the country! From the sowing of the seed to the storing of the garner, every step can be clearly traced and the object of each process understood. The reward of diligence is made evident upon every hand.

The varied work of the country teaches the youth to early assume and bear responsibility. Each member of the family has his allotted tasks for which he is held accountable. This feeling of personal responsibility the child brings to his school work and through its influence will tend to be independent in work and diligent in fulfilling all requirements. As teachers, we

should foster this feeling for it is this, we believe, that makes the country trained youth so desirable in all great undertakings.

The rural school cannot hope to excell in equipment or in method of work. It may be deficient in many ways of training the intellect, but, for arousing the sensibilities and for developing the will, it has natural advantages which it should utilize to the utmost. Long ago it was said, and the years have proved the truthfulness of the saying, that:

"When all is done and said,  
The heart outweighs the head."

President G. Stanley Hall in an address before the Vermont State Teachers' Association, urged the teachers, on behalf of the colleges, to send them fewer "swelled heads" and more "great hearts." This is the need of life as well as of the college and in this, we think, the country schools have an unquestioned advantage.

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### SANITATION AND MORALS IN OUR COUNTRY SCHOOLS.

B. E. MERRIAM, SUPERINTENDENT OF SCHOOLS,  
BELLOW FALLS, VT.

At the present time when so much is being said in regard to the Rural Schools, especially those in New England, it is well that we consider one of the most important of the phases of Country School Life, *i.e.*, Sanitation and Morals.

1. Location. In the days of our fathers and mothers little thought was given to the location of the school house so that we find many of the older ones in places which the educators of the present day would condemn. Yet even though we find an occasional one in a damp and shady place, much can be done to improve the location. It is useless to say that everything depends upon the teacher; it always does and the location of the school house, while it cannot be changed, may be greatly improved. I shall have in mind the teacher who is to remain two or three years in a school.

Low places should be filled up, stones should be removed, all rubbish in or about the building should be removed and burned. If there is a broken stone wall near, that should be made over. If the building is in a damp place, the doors and windows should be kept open as much as possible in good weather. There should not be a mud-puddle in front of the door. A good walk should be provided. I realize that it will require a little time for the teacher to accomplish this, but she will find her first help in her older boys and girls and through them in the fathers and mothers.

The ideal location is on sloping ground with plenty of light and not shaded too much. There should be plenty of good play room. There should be trees planted each year but none very near the building. In the fall term, at the opening of the year, the teacher should begin to plan for the spring. Flower beds should be made, shrubs planted and stones gathered for walks and borders of beds. Young trees and shrubs along the highway should be noticed so that as soon as possible in the spring trees may be planted.

Vines should be planted. These should not be annuals alone, but hardy vines such as grow over the fences, both wooden and stone. It will need some hard work for the teacher and not all can be accomplished but a good beginning may be made and in the second year much can be added to the first and the school will be deriving the benefit from the first year.

2. *Janitor.* It is absolutely necessary that the school building be kept in good condition. There should be a good janitor. Too often, this work has to be done by a young boy or by the teacher herself. Even in the latter case much care should be taken to have the school room clean. Floor should be well and often swept. Windows should be clean, seats dusted and all corners well cleaned. The floor should be well washed once each term, at least. Boiling water should be turned into the corners and into the cracks of the floor. Much sickness may be prevented in this way.

3. *Ventilation.* One might say, without thought, that the matter of ventilation of the country schools is a matter of little importance. I have found that this is one of the most important things to attend to and often the most difficult. Windows should be lowered from the top and never raised at the bottom so that the draft will strike upon the heads of the pupils.

Usually in the country schools no way has been provided for properly ventilating the room. The windows may be lowered slightly from the top or a board placed under the lower sash. The door may be opened a little and at recess time, the fire should be started up and doors and windows opened for a short time. I find that there are more colds in the rural schools in the winter than in the village schools. While some of

this is due, no doubt, to the long distances that the pupils have to ride, I think that most of it comes from allowing cold drafts of air to strike upon the heads of the pupils.

4. *Water Supply.* Too little attention is given to the drinking water. In many places there is good, pure spring water nearby but often this is not the case. The teacher should examine the spring to see that it is well cleaned or if the water is brought from one of the houses nearby, it should be pure water. See that the water bucket is clean. Well washed each day. Do not allow it to stand in the school room. Have a clean sponge to clean out bucket and cups. The pupils should be urged to furnish individual cups but if this cannot be done, the cups should be well washed and and scalded. I believe that much of the sickness in country schools comes from the water supply or the germs from water pail or cups.

*Out House.* Another source of disease and sickness comes from the out house. This should be kept clean. Oftentimes the teacher seems to wish to avoid this but it is a part of her work and cannot be too well cared for. Toilet paper should be provided, every thing kept clean and sweet about the building.

*Morals.* I think that it is often thought that the morals of the country schools are low. I do not believe this to be true. I think that the hearts and minds of our country boys and girls are far purer than those of the city. Life in the country is simple. The child comes to school untouched by the many vices of the crowded village and city schools. The teacher is confronted with far less complex problems in the country than in the city. Hearts are open and easily ap-

pealed to and touched. Suggestions are more readily taken. All is new to the country boy and girl and many of the things which are simple to the village boy are entirely new to the country boy. The country boy does not look for a motive in everything that his teacher does or wishes to have him do. Hearts are open to the truth. Lessons of right and noble things touch him more easily.

It goes without saying that the life of the teacher, morally, should be above reproach. This guide, this uplifter, this educator cannot allow herself to do things which she does not wish her pupils to do. Too often all of the good influence of the teacher is thrown away by one thoughtless evening. Watch your boys and girls carefully. Be tactful. Enter into the life and plans of the older ones. Make yourself a citizen of the community as long as you remain there. Be helpful in the home where you board. Seek to uplift it by your own kindness, and thoughtfulness. Really interest yourself in the school, in the boys and girls, in the homes, and you will find that you will be so needed in the place that your services will be in demand and you will wish to remain until you are called to a larger field for which you are fitted through the earnest, painstaking work which you have done in the smaller field.

## DEPARTMENT OF SECONDARY EDUCATION.

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### GREEK IN SECONDARY SCHOOLS.

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LATIN SCHOOL.

The staple of liberal education in the countries of western Europe for more than three hundred and fifty years, and for two-thirds as long in this country, has been the study of the Greek and Latin languages.

It is true that this dominance of the classic languages has not met with universal and unquestioning acquiescence. It has been opposed at almost every period by many thoughtful and educated men, particularly in France, where, within a hundred years the autocracy of the classics has repeatedly provoked hostile legislation.

But our concern in this paper is with Greek. What is its present status, and what is the trend? Ever since the revival of learning and everywhere Greek has been subordinated to Latin. It has been begun later in the schools, it has had a smaller allotment of hours, it has been less rigorously insisted upon, and it has been studied by far fewer persons. Germany has long been, of European countries, the stronghold of classical study, but in only one class of its schools does Greek form a part of the curriculum. There are two signs that even in Germany Greek is not holding its own. The removal of the exclusion from certain departments of the university study of those who have not been



prepared in Greek, and the relatively more rapid growth of the non-classical schools.

In the French *Lyceés* the fortune of Greek has varied, being now included and now excluded, with its hours now increased and now diminished. Finally, by the legislation of 1901, Greek is excluded from the first part of the course and made optional in the last part. This, if it does not mean the ultimate extinguishment of Greek, probably marks the beginning of a decided decline. If we turn to England the same tendency is manifest. Since the report of the royal commission on the great schools of England in 1864, modern subjects, that is, history, science, and modern languages, have successfully asserted their claims and have, though grudgingly, been allowed recognition, where once Latin and Greek reigned with absolute sway.

Let us look at our own country. So many of our colleges require Greek for admission, that the total effect is that of offering a high premium for the continuance of Greek, and even more than that. The direct offer of a liberal subsidy would hardly be so efficacious. In other words Greek is in this country a highly protected study. Drop the college requirement, and can anyone doubt that the number of Greek students in our schools would greatly diminish? The class admitted to Harvard college in 1901 numbered 570. All of this number necessarily offered at entrance either Latin or Greek, or both, but as soon as the necessity of pursuing either of these two languages was removed, all but 192, or more than 66 per cent took advantage of the opportunity to drop both. Harvard encourages the offering of advanced Greek at entrance by no longer requiring Greek composition of those

who offer Greek, while allowing to it two points, the same as to Latin with composition. Yet the number of her candidates who go up from the schools with Greek is growing smaller, both relatively and actually. According to information from Harvard there has been a decline in four years of 240 in the number offering Greek at entrance. The inference would be that the number of students of Greek in the schools of the country at large is declining, and this inference is confirmed by facts which I have soon to present.

I pass from Harvard College to the State of Massachusetts, the stronghold of Greek study in the United States. There are more students of Greek in the public schools of Massachusetts than in New York, with approximately thrice its popularity; more than in all the other New England states and in the eleven westernmost states combined. Yet Mr. Macdonald, agent of the Board of Education, tells me that Greek is rapidly going out of the rural high schools. In distinctively classical schools we should expect Greek to strike its roots most deeply. Yet I know one such school where Greek, though optional, is encouraged, and yet for some years no more than from a third to a half of its graduates have gone up to college with Greek.

Let us look now at the country as a whole. From Commissioner Harris' report it appears that in the academic year 1897-98 a little over three per cent., exactly 3 12-100 per cent. of pupils in the public high schools were studying Greek. The per cent. had not varied greatly in the preceding nine years, but three years later, in 1900-1901, the per cent. had fallen to 2 63-100 per cent.

The result of this inquiry, stated in a word, points to

a decline in the number studying Greek both at home and abroad. The movement away from Greek, so far as it can be traced, seems a world movement. There are signs that influences are at work that will hasten this decline in our own country. It is a part of the conflict between ideal studies and the more immediately or obviously useful studies. We are credited with being an intensely practical people, and it is likely that the question will be more frequently and more insistently asked, "Does Greek pay?" Only about two per cent. of the high school pupils of the South and West are pursuing Greek.

Less than three per cent. of our boys and girls in the public high schools are studying Greek at the present time, and another decade will probably see that number sensibly diminished. Is it to be regretted that other subjects are supplanting Greek, and does it mean a deterioration in education? What is the duty of schoolmasters who believe the movement should be resisted or compensated for, if that is possible?

So far, I do not believe that the interests of liberal education have suffered loss, because a smaller proportion, now pursue Greek. Nothing is more certain than that, when Greek was imposed upon all who entered college, it was pursued by many who had neither inclination nor aptitude for it, who dropped it as soon as it was possible, and who never derived from the study the slightest lasting good. Greek as an optional study, which it is fast becoming, will attract those who are best fitted by natural powers to profit by it and enjoy it, and their progress will no longer be delayed and obstructed by the indifference and incapacity of

those to whom the study would be a burden and a drudgery, or as some one has said, "a prolonged nightmare."

Before answering the second question, What should be the attitude and aim of schoolmasters? we ought to ask ourselves just what we understand by the study of Greek. In its common acceptation it means the rather narrow and very limited study of the language, with an implication of the study of the literature. But school study of Greek, which is our theme, hardly includes the study of the literature at all. It is true that the student, if well taught, gets here and there some glimpses of literature, but under such distracting conditions that impressions are fitful and dim. Nothing is read and comprehended as a whole, which we think in English training is a matter of prime importance. Some books of Xenophon, some fragments of Herodotus, some parts of the Odyssey, here and there stories from the Iliad, constitute about the whole for the more favored. Drill in forms and syntax and the acquisition of a limited vocabulary, with the scanning of hexameters after an utterly artificial method consume the time and fatigue the energies of the mind. There is no opportunity, such are the exigencies of examinations ahead, to digest and enjoy what is so "got up."

If the progress of decline is to be stayed, or can be stayed, it will be, in my judgment, through a decided liberalizing of the study of Greek. As Professor Wright has finely said, the teacher of the Greek language must be a teacher of *Greece*, that is, of its literature, its history, its religion, its art, its politics, in a word, its civilization and its spirit. And the teacher whose knowledge of the language is limited and im-

perfect may still be an excellent teacher of Greece. Once this would have been impossible. How is it possible now? It is possible because all the written records have been deciphered by the learning of generations of men. The writings of the Greeks have been translated into the languages of Europe, and may be read, studied, comprehended, and mastered by each one in his own vernacular.

But here rises the old question, not merely of translations as instruments, but of the comparative value of reading works written in foreign languages in the original and in translations. I know very well the common attitude of scholars towards translations of the classics. I am not now speaking of the abuse of translations by pretended students in school and colleges as ponies, as miserable makeshifts and substitutes to avoid genuine work. I speak of scholars in the proper sense, men of learning. Their tone is apt to be that of disparagement, if not of contempt, though I seem to see a change, since, within the last fifty years so many eminent scholars have themselves produced translations which no one can speak of with disrespect.

Grant that it is better to read Greek books, if you can, with "feet on the fender," how many of those who have made a prolonged study of the language can do it? Perhaps, but probably not, one in a thousand. Consider what it means to read Greek *ad librum apertum*. It implies a mastery of an enormous vocabulary, which can be got only by reading many times as much as the ordinary student goes through in his preparatory and college course. One would not expect to acquire mastery in so easy a language as French without reading, say, roughly 10,000 pages; or twenty vol-

umes of duodecimo size. I think any competent judge would say that Greek is ten times as hard to read as French. That, for example, it would cost ten times the preparatory study to read Aeschylus that it would to read Racine. Briefly put, a mastery of Greek sufficient to read with rapidity, ease, and pleasure, demands an amount of concentrated and prolonged study, that only here and there a student can and will afford. It follows, then, that all but a select few must call to their aid translations, if they are to get any wide acquaintance with Greek literature.

The defence of Greek can no longer rest upon the original ground, that the treasures of Greek thought, deed, and word, are sealed up from all access except by the door of the Greek language, since a fallacious defence of a good cause, sometimes does more harm than a hostile attack. Persons who do not read Greek are at no such fearful disadvantage, as compared with those who do; and it does not follow that they are debarred from all knowledge and appreciation of the wealth of Greek literature. I am far from maintaining that they lose nothing of what perfect mastery of Greek may yield, but I do assert that the loss is relatively not great. Let us clear our minds of cant. How is it with the Bible? Are the millions of men who have found in their Bible unending sources of comfort, hope, and exaltation, to be pitied because the original Hebrew was to them a sealed book? And if it had not been, would the impressions upon mind and heart have been more vivid, real, and penetrating, coming direct from the Hebrew than through the medium of translation in the vernacular?

My object is not to belittle the study of the Greek



language. I consider it one of the happy accidents of my life that I am privileged to earn my bread by teaching Greek. The study of the language I deem indispensable for teachers of language, devotees of literature, and some professional men, and for those who can afford the time and effort to attain the highest culture. But I believe we have made the study of the language too exclusively, or at least, too predominantly, our aim. I want to see every encouragement and inducement offered that promises to attract more students to Greek studies in a broad way and in a spirit of enthusiasm. The language, that is, the *ipsissima verba*, of the Greeks, will be studied, it may be, and most likely will be, by fewer persons. But everything else that concerns the Greeks, their history, their literature, their religion, their art, their polity, their ideals, ought to be, and I believe will be, studied far more and by far greater numbers.

Aside from its content of knowledge, from the fact that it is the chief source through which we learn what Greek life and civilization in all its aspects was, has it for us any special value? I believe it has, first, as being so different from our own literature, or, to speak with more precision, from our modern imaginative literature. Speaking generally, I should say the aim of Greek imaginative literature, and it is that part of the literature that we chiefly have in our minds, when we use the words "Greek literature," the aim, I say, was to please by beauty of form; of our own, the aim seems to be to excite the feelings. Consider how enormous a place love between the sexes occupies, the most exciting of all sentiments, in English imaginative literature, and how small a place it holds in the



literature of Greece. Is not our main test of power in theatrical acting, in a poem, play or novel, its capacity to excite and thrill? The Greeks were an excitable people, but they were too sane to love excitement. Phrynichus moved the Athenians to tears by his famous play, *The Capture of Miletos*. They acknowledged the genius of the poet, but they fined him a thousand drachmas because he had excited them to weep, and decreed that the play should never again be acted. The highest tribute that I have heard paid to Nance O'Neil is that she makes her audiences sob.

The effect of the great dramatic works of the Greeks on the modern reader is what I believe was intended for themselves. It is not intense interest in the development of character and in an unexpected *denouement*. It is rather in a pervading fitness, harmony, and proportion. May I be excused for a personal allusion? I happened, two or three years ago, in a summer vacation, to read for forty successive mornings, Homer and certain Greek plays, and they were delightful mornings to remember. I do not think that at any moment my pulse beat faster than usual, or that I momentarily held my breath; and I am sure no tear wet the page. The impression upon my mind and feelings was vivid, deep, and prolonged. For one thing I was conscious of a certain uplift, as if I had been in altogether noble company. Yet I had associated with mean men, as well as noble; with shepherds, slaves, messengers, peasants, cowards, common soldiers, as well as with knights, prophets, kings, and noble virgins. I involuntarily contrasted my feelings then with those of other summer days, when I read such books as *Tess of the D'Urbervilles*, and the *Manxman*. (Of course I am not com-

paring these books with the masterpieces of Greek literature. I am only relating a bit of personal experience.) They excited me and made me miserable, and left memories of pain; and if I had had the power, I would have imposed on the authors ten times the fine laid by the Athenians on Phrynichus. One lesson, then, of Greek literature is the beauty of sobriety, calmness, measure, proportion, the spirit that marks their sculpture and architecture. It is one of the great original literatures and is the fountain head from which all modern literatures have copiously drawn.

The history of Philosophy has had at times unusual attractions for me, and I have been often struck, as I suppose most readers are, with the little that is absolutely new in the speculations of modern philosophers, from Descartes to Royce. Emerson boldly asserts that "neither Saxon nor Roman has availed to add an idea to Plato's categories." "Out of Plato," he says, "come all things that are still written and debated among men."

I do not forget that for us teachers, guides and instructors of youth, the value of Greek literature is chiefly to be considered as affording ideals of character and action. I lately read with a class of boys that passage in Cicero, familiar to you all, beginning, *Quam multas imagines*. "How many delineations of the noblest men have been left us by Greek and Roman writers, not merely to be gazed at, but rather to be imitated," and I paused to recall to the boys, who had read a little Greek and Roman history, four illustrious examples from the roll of famous Greeks. One of personal integrity in high station, in contrast with the opposite vice, which has become so common among

lawmakers in this country as to add a new word to our language, or rather a new application of an old word, "grafting." Epaminondas not only spurned the splendid bribe of the Persian king, which any honest man would have done, but would not accept a loan for the use of his army, when it was in great want, from his friend, the Thessalian king, lest the shadow of a suspicion should be cast upon his motives.

The second, an example of obedience to law, in which many see alarming signs of decadence among us. Socrates, you know, refused to escape an ignominious death at the hands of the public executioner, rather than disobey the law, though conscious of innocence, and though promised immunity by his friends.

Where in literary annals can be found a nobler example of Christlike forgiveness of ingratitude than in Phocion's last message to his son, as he was about to die at the command of his countrymen whom he had served with single-hearted devotion. "Bid him bear no grudge against the Athenians."

The self-sacrificing patriotism of Regulus is known to every schoolboy. But surely the spirit of Pelopidas was not less noble, who, in a Thessalian dungeon, taunted his captor, the king, in order to provoke the tyrant to put him to death, and by so doing rouse his fellow Thebans at home to act for their country's good.

From the writings of the most engaging of Greek authors what a gallery of portraits looks down upon us with noble calmness and dignity, for admonition or reproof, for guidance and inspiration! To some it may appear that types of greatness in action and char-

acter that are so remote in time and so foreign in setting, have something about them academic and unreal.

But I am sure that to others the very detachment that time and change of conditions have wrought make them stand out with increased vividness and power. Is not Washington more honored and admired by us than by his contemporaries, and do not foreign peoples have his name on their lips ten times as often as they did a century ago? For my own part, I believe that twenty centuries hence the lives of Garrison and Lincoln will have a quickening power to stir the hearts and imaginations of boys of other lands and alien speech.

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#### HOW PHYSICS AND CHEMISTRY CAN BE MADE MORE PROFITABLE.

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It is my purpose to indicate some practical lines along which physical science as a factor in the secondary school curriculum can be made to yield a return commensurate with the time, money, and energy expended in its inculcation. I firmly believe that physical science has rich deposits of educational wealth, but the mine will yield its profit only by sympathetic and judicious co-operation of superintendents, principals, and teachers, and the points presented are intended for the mutual consideration of these three classes of educators.

We need better teachers of physics and chemistry. This desideratum might be urged in all departments,

but there are special reasons for its insistence in science. Few teachers in chemistry and physics have had instruction at all comparable with the special, extensive training possessed by the teachers of languages and mathematics. Until recently this deficiency was not entirely the fault of the teachers, for colleges have been notoriously weak in those courses needed by the prospective teacher of science. At the present time several colleges offer science courses designed for those who intend to teach, and a few institutions have excellent courses in their summer schools, Harvard, Columbia, and the Massachusetts Institute of Technology being in the latter class.

It is true that this enlargement of the curriculum is recent, but teachers can no longer truthfully say that there is no opportunity to prepare themselves for actual teaching. It is the *duty* of science teachers to secure, in some way, adequate preparation. Teachers of Latin, modern languages, and mathematics, as a rule, have a broad knowledge of their subjects resulting from many years of study, but it must be frankly admitted that many who are teaching physics and chemistry to-day had no such intention in college and made no special preparation for such work. Hence they lack that confident grasp of science so essential in teaching beginners. The lack of a pedagogical perspective compels too many teachers to force their college courses upon suffering and helpless beginners, or, what is worse, prevents them from selecting the proper material for secondary schools. Clearly, then, one way to make science more profitable is for teachers to strengthen the foundations, adapt courses to beginners, cultivate the acquaintance of

other teachers, become familiar with new apparatus and recent books, aiming always to acquire the methods which shall be effective with pupils as well as comfortable for teachers.

Physics and chemistry will continue to be unprofitable until the instruction is given with a more uniform aim. There is an appalling diversity of purpose on the part of science teachers. With some *laboratory work* is the sole end, with others it is *exact measurement*, even though the student learns to hate science; with others it is *theory*, despite the towering mass of interesting facts akin to human experience; with others it is *lecture experiments*, which have no beginning and no end as far as training goes, with a few it is common things—soap, matches, the gas meter, the automobile, etc.—all good in themselves, but still insignificant parts of a more important whole. Contrast these incongruous aims with those of teachers in other subjects. The Latin teacher knows that his business is to instruct his pupils in the syntax of the Latin language and the beauties of its literature. He knows furthermore that he has no right to omit fundamental rules or parts of texts or well established essentials, simply because he dislikes them. The teacher of English does not swing entirely clear of the college requirements, because he wants to satisfy a whim. He may not approve the scope of the requirements, but the good of his classes is regarded as superior to his personal comfort or ambition. I do not hesitate to claim that much of the waste in science teaching will continue as long as the teacher is a law unto himself. Not that rigid stereotyped courses are recommended, but it is evident to all candid teachers that uniformity



in *aim* is not only desirable but will also still leave ample room for the adaptation of courses to personal tastes and local conditions.

The matter of supplies is vitally connected with economy in science teaching. In a recent questionnaire one query was, "What is the value of your scientific apparatus?" One teacher replied, "Total value \$10,000, but much of it is obsolete." This commentary is sad, but typical. It is an unpalatable fact that money for supplies is foolishly spent. Equip slowly should be the watchword of the science teacher. Judicious purchases can be made by studying apparatus catalogues, conferring personally with dealers, visiting laboratories, and exchanging views with teachers doing the same grade of laboratory work. To these requisites must be added the old-fashioned proverb, "Spend another's money more carefully than your own." On the other hand teachers are often compelled to order supplies in a most unbusinesslike manner. No housekeeper ever orders at one time all the food to be consumed in a year nor the exact amount needed to meet uncertain demands. Yet in many schools the science teacher is required to order in May or June sufficient material for a year. It is impossible to predict the amounts needed, especially when the elective system yields classes of varying and uncertain size. Moreover, accidents, unavoidable losses, and unforeseen demands lead to unexpected consumption of supplies. If it is necessary to order most of the supplies at one time, then the science teacher should have access to a small emergency fund to use without restrictions, except of course, rendering an itemized receipt.



Physics and chemistry will continue to be unprofitable until their *time content* is more judiciously adjusted. It is a mistake to assume that laboratory work can be profitably performed any time during the day, and it is a deplorable mistake to assume that the science teacher can teach effectively every period in the day. Time enough should be given to the individual sciences to secure fundamental results. If the time is insufficient, then the class will be in the plight of the man who just misses the train. Recent statistics show that the better high schools devote at least five hours a week to physics and to chemistry during a school year. This time is adequate, provided it is placed at the sole disposal of the teacher of each science. He should be allowed to use this time as the psychological conditions of his classes demand. His programme should be flexible as far as the utilization of each period is concerned. That is to say, he should not be required to have a lecture, recitation, or a laboratory period at a fixed hour. The programme can be adjusted to meet this condition, since the point involved is *location* of classes, not the time. Programmes are doubtless prepared with less labor when the conditions are rigid, and other teachers may crave the use of a science lecture room for unexpected work. But it should not be overlooked that it is unprofitable—to state it mildly—for science classes to recite when they should be performing experiments or to do “the next experiment” when the preceding ones are not understood. It is not claimed that the science teacher should have the first choice of time. The *point* is that physical science like any other subject will be unprofitable if the work is not conducted under conditions

favorable for its assimilation and retention. The science teacher ought also to have at least one double laboratory period a week. This provision permits consecutive mental work, avoids troublesome interruptions, and allows time for consultation between teacher and pupil. One distinct advantage of the double period is often overlooked. Many experiments consume about forty minutes, and it sometimes happens that the dismissal bell rings as the experiment is approaching completion, and although a few more minutes would suffice for the experiment, the work must be left in such a chaotic condition that the labor of the whole period is worthless. . . .

In my opinion the inability or unwillingness to apply certain psychological and ethical principles accounts for most of the profitless work.

First, laboratory work is concrete labor. Now concrete labor is difficult to shirk. In studying history, geometry, or language the mind may easily wander, but when the mind is following an experiment in the laboratory it does not readily ramble. Something is constantly happening to attract attention, and the mind passing quickly from concrete to concrete has little or no inclination to roam. Apparatus must be arranged, chemicals collected, and experiments started, watched, controlled, or stopped. But if the programme restricts the time for laboratory work or if the teacher persists in explaining in the classroom what the pupil can think out unaided in the laboratory from his own data, then it is folly to expect the laboratory work to yield good results. There must be enough carefully arranged and judiciously supervised laboratory work to prevent the normal tendency to

shirk; but it must not be so simple as to permit the loss of self-respect nor so difficult or dangerous as to incite fear, for in either case the tendency to shirk will be overcome with difficulty. Furthermore the laboratory work must be followed up by searching questions, for if the pupil once gets the idea that the mere performance of experiments is the sole end, then you have opened for him a broad avenue for shirking. Each pupil should be taught at the outset that any reasonable question may be asked on any experiment. If such a regulation prevails, pupils soon learn to get from laboratory work profitable mental results, not the least valuable of which is power and willingness to perform work accurately, quietly, and quickly.

Second, laboratory work is suited to relieve mental fatigue. It is restful, if rightly performed, because it affords numerous opportunities for harmonious activity. But if the laboratory period is too long or too short, if confusion reigns, if there is no opportunity for pupils, especially girls, to sit down while writing notes, consulting reference books, or performing long experiments, if the directions for performing experiments are brief, long or vague, then mental fatigue will be increased, not relieved. Laboratory work under these unfavorable circumstances cannot afford the mental rest it is designed to provide. So also if the temperature of the laboratory is too high owing to the heat from the Bunsen burners or if the air is vitiated from imperfect ventilation or by the presence of noxious gases, the body will soon react unfavorably on the mind and thereby increase the mental fatigue. It is obvious that by regulating a few simple things, pupils may leave the laboratory mentally rested, or at least

they can be provided with an environment conducive to the harmonious operation of mind and body.

Third, teachers must not be satisfied because pupils are curious or inquisitive. Curiosity is a *good sign*, but it is only a means to an end. It should be encouraged at first, but once active it should be rationalized. Pupils must be led from mere desire to know indiscriminate facts to an intelligent craving for systematic knowledge. Pupils do not realize the fundamental importance of voluntary attention, hence they need to be taught the superior value of learning to complete an experiment skilfully, patiently, and confidently. The necessity of teaching voluntary attention is a good argument for incorporating simple quantitative experiments into science courses. As one watches a class perform experiments involving accurate weighing and measuring he is forced to conclude that such work contributes most effectively to voluntary attention.

Curiosity, interest, and voluntary attention are intimately connected with inhibition or mental arrest. In plain Anglo-Saxon inhibition means "breaking into," "upsetting," though its psychological import is more specific.

Provision should be made in all laboratory work for compelling the pupil's mind to travel without needless inhibitions from the object of the experiment through the manipulation to the conclusion. The work should be so supervised that pupils will see the whole field of consciousness and not yield to reckless impulse or foolish inhibition. Experiments to be mentally profitable should be so expressed and arranged that the average pupil cannot fail to grasp the title, the exact method

of procedure, the essential observations to be made, and the probable conclusion which the observations will permit. The title of each experiment should be known so that the pupil may have an initial idea, a mental start, a guiding star. Unless he begins correctly, he may not, probable will not, end correctly. A knowledge of the exact method of procedure is essential, otherwise he will not know how or where to begin his work, nor can he carry it on intelligently, confidently, profitably. A great deal of time is wasted in a laboratory because pupils do not know how to work, and in many cases they are not to blame for the aimless, fruitless labor, because they were not at some time told or shown how to work. They yield to some foolish inhibition simply because they see no other path. Again, the desired observations should be indicated in some way. Pupils are learning how to observe; one object of experimental work is to teach observation. Surely we ought not to assume what we are trying to teach. Beginners do not know the difference between the trivial and the important, the scientific and the unscientific. They must be pointed toward the path having the fewest inhibitions, even though such direction reveals some truth which they might possibly discover if sufficient time were taken. Finally each experiment should lead to some definite result. Otherwise the pupil is left suspended, is actually robbed of the inestimable privilege of drawing a conclusion. Experience shows, however, that this conclusion must be indicated. It need not be deliberately told, but it can be suggested by appropriate questions. Such questions eliminate inhibi-

tions, they conduct the mind along a logical path, they extend a helping hand to a halting thought, they train the mind to pass from cause to effect.

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### THE HIGH SCHOOL AND CIVIC SPIRIT.

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New York City, until 1897, had no high school system. Now the districts of Manhattan and Bronx which comprise the territory of the former city, maintain three general secondary schools, a high school of commerce, a girls' technical high school, and plans are being carried forward to provide a manual training school in the immediate future. Already over a million dollars has been spent in buildings for these schools and the total outlay will amount to over three millions. By the reports of 1902, there were in attendance 6,415 pupils, instructed by 270 teachers. Greater New York had a total high school population of 15,185. Public opinion supported the Board of Education in placing these schools on a basis of highest efficiency, and that despite the fact that social leaders and men of wealth in New York do not send their children to the public schools. There is a significant connection between the establishment of the public secondary schools and the awakening of the citizens to the need of a better tone of municipal and civic life. Though Tammany has since come into power



the high schools continue to prosper and are now so strong that no political party dare attack or injure them.

A like development of the public high school is the rule throughout the country. Its growth as an institution suggests latent possibilities of service on which the people are sure to make large demands. Only as it meets new responsibilities will it justify public confidence and continue to receive public support. A most important function, as yet only partially exercised is that of promoting a strong, vigorous civic spirit among its pupils. As the public library, under the insistent demands of the community has been transferred in its activities in the last twenty-five years, so the high school is to grow in scope and variety of influence and become a potent factor in shaping the plastic popular mind and conscience.

The secondary school holds a strategic position in the present struggle for better municipal conditions, since its pupils are peculiarly susceptible to ideals of community service, and are ready for instruction and inspiration in civic duties.

Formal instruction should be given in history, civics, economics and in local institutions, the various departments of the city, problems of taxation, sanitation, care of streets, schools, parks and city betterment should be discussed. The intellectual powers and interests of young people are ready for such knowledge.

A large understanding of the duties of life is necessary to proper development. Best results are had when the facts are studied at first hand by direct personal observation. Attention should be called as occasion offers to plans for social improvement. Let



the young people know of the public spirited men, who have served and are serving the city with conspicuous fidelity. In studying the broader range of history, emphasis should be laid on the price that has been paid for all the political and civil rights enjoyed by the people.

Another service to the state and city that must be more thoroughly done by high schools, is the fitting of the boy and girl for economic efficiency and independence. Technical high schools and commercial courses meet the demand. Youths with skill for some definite service, become thereby qualified as valuable servants of the state.

Finally the high school must seize upon the latent instincts, desires and springing ambitions of the adolescent period and direct and guide these elements of life into paths of true service. Formerly discipline meant repressing all the natural activities of the young. Now the aim is to give them opportunity for right expressions. Unless there is such a self-realization in youth, men and women fail of attaining full development.

The instincts of the high school period are largely concerned with organization and co-operative action. They are the raw material out of which our civilization has been fashioned. Genuine boys under proper guidance find excellent opportunity for exercising their talents for organization and leadership in connection with athletic teams, literary societies and various school activities. Their natural instincts have such room for expression there is less of a disposition to mischief and evil.

The wisest policy of the school is a sympathetic supervision of all the various societies and organizations.

In the general discipline of the school, there should be a certain amount of freedom, as thereby responsibility is felt by the pupils and they grow into an attitude of loyalty which is better than forced obedience. Marks and the struggle for personal ends should be given subordinate place.

Another means of seeming devotion to the school is to cultivate the historic sense by making much of the past of the institution and of its teachers and pupils, who have done conspicuous service to city and state. Much may be learned from the great public schools of every land in the cultivation of the regard and reverence of youth.

There is great need of a rallying of community press in our cities in the struggle against corruption and in the movement for betterment of conditions. Our high schools should furnish a great body of trained disciplined citizens inspired with high ideals, and filled with the true civic spirit.

**DEPARTMENT OF NORMAL SCHOOLS.**

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**THE CONDITION AND PROSPECTS OF NORMAL SCHOOLS IN NEW ENGLAND.**

ALBERT G. BOYDEN, PRINCIPAL, STATE NORMAL SCHOOL,  
BRIDGEWATER, MASS.

The State supports public schools for the education of its children, to supplement the education given by the home and the church. It supports normal schools that its children may have better teachers in the public schools; that the school may do its part in developing the children into true men and women who shall maintain the educated home and the Christian church, and thus secure the highest well-being of this great people.

The public school is an indispensable agency in the education of the children of the State. The normal school is an indispensable agency in the education of the teachers of the children.

James G. Carter of Lancaster, Mass., was the first to call public attention in this country to the necessity and advantages of normal schools, by a series of articles published in the Boston Patriot in the winter of 1824-5, with the signature of "Franklin." In these he maintained that "the first step towards a reform in our system of popular education, is the scientific preparation of teachers for the free schools; and the only measure that will insure to the public the attainment of the object, is *to establish an institution for the very purpose.*"

Mr. Carter made the definite proposition for the establishment of a new kind of institution founded on the thought that teachers must be educated to fit them to direct the unfolding and perfecting of young human lives, just as doctors must be educated to fit them to secure the preservation of the health of human bodies; just as lawyers must be educated to fit them to secure the prevalence of justice among human beings.

In 1837, Hon. Edmund Dwight of Boston, a member of the Massachusetts State Board, offered through the secretary of the Board to furnish ten thousand dollars, "to be expended under the direction of the Board, for qualifying teachers for our common schools," on condition that the Legislature would appropriate for the same purpose an equal amount. The Legislature accepted the proposition. With the sum of twenty thousand dollars at their command, the Board decided to establish three schools for the education of teachers, each to be continued three years as an experiment. The first was opened at Lexington, in July, 1839; the second at Barre, in September, 1839; the third at Bridgewater, in September, 1840. These were the first three State Normal Schools in America.

At the end of three years these schools were so vigorous that their lease of life was renewed for another three years by an appropriation made by the Legislature for their support. Upon the expiration of this second lease they were adopted by the State and christened State Normal Schools.

In 1845, some thirty or forty friends of popular education, to express their approbation of the course of Horace Mann in the conduct of the great work of reforming our common schools, proposed the placing

of the normal schools upon a firm and lasting basis by furnishing them with suitable and permanent buildings. They pledged themselves to furnish five thousand dollars, and to ask the Legislature for a like sum for this important purpose. The Legislature appropriated five thousand dollars, and Charles Sumner gave his bond for the five thousand dollars pledged by the memorialists, that the funds might be immediately available. When the Board of Education had secured plans for the erection of new buildings for the schools at Bridgewater and Westfield,—the other school had been provided for by the gift of a building by Josiah Quincy of Boston,—it was found that no contract could be made for the amount at the disposal of the Board. Horace Mann came forward and gave his own obligation to make up the deficiency. He mortgaged his law library to raise money to pay the last bills in settling the cost of these buildings. Mr. Mann was at this time receiving the munificent salary of one thousand dollars as Secretary of the Board of Education. The sum advanced by Mr. Mann was afterwards reimbursed from the State Treasury.

At the dedication of the new building at Bridgewater in August, 1846, Mr. Mann said in responding to the toast "The health of the Secretary of the Board of Education," "Let no man who knows what has been suffered, has been borne and forborne, to bring to pass the present event, accuse me of an extravagance of joy. I consider this event as marking an era in the progress of education,—which, as we all know, is the progress of civilization,—on this western continent and throughout the world. It is the completion of the first normal school house ever erected in Massachusetts,—

in the Union,—in this hemisphere. It belongs to that class of events which may happen once, but are incapable of being repeated. Coiled up in this institution as in a spring, there is a vigor whose uncoiling may wheel the spheres."

The question, shall these normal schools succeed? had to be answered by the heroic efforts of the first principals of these first three State normal schools. These men, sustained by the Board of Education and encouraged by the indefatigable Secretary of the Board, successfully performed the experiment of establishing these schools in the confidence of the people.

They demonstrated to the frugal voters of the Commonwealth the utility of a new set of institutions which were to be supported from the State Treasury; they encountered the fierce opposition of many teachers who thought they were to be superceded by the graduates of these new and hitherto unheard of State seminaries; they had to do their work without suitable buildings and apparatus, without public sympathy, and with their pupils under their instruction only for a brief period, and fluctuating in their attendance. They had to accomplish their purpose by the sheer genius of their personal ability and indomitable resolution, with a faith that removed the mountains in their path and an industry that knew no fatigue.

What have the normal schools of Massachusetts accomplished? Last year the State Board of Education appointed Mr. Ellis Peterson, who had been for twenty-six years a supervisor of the Boston public schools, to spend the year in the inspection of the State normal schools and report upon their condition. He was to visit also the best normal schools in other States for

the purpose of comparison. He did so, and I quote from his report:

He says, "The substantial fact is, that the majority of the graduates of these schools have been of immense service to the State; that their influence has been felt, directly or indirectly, in every city and village of Massachusetts and, indeed, in other States. They have carried into the common schools a higher standard of moral excellence; greater courtesy; more humane methods of school government; a greater regard for the health and comfort of pupils; a broader and more exact scholarship; a clearer, more distinct, and more philosophical view of the ends of education and of the method of teaching; and, finally, greater skill in presenting subjects of study to pupils, in co-operating with them, and in training them to think and work independently. The State normal schools of Massachusetts, judged from their substantial accomplishments, must therefore be pronounced effective agents for training teachers for the common schools. And they stand in the front rank of State normal schools."

The normal school idea, like the early New England spirit, has spread over the north, the west, and the south of our country until there is not a State or territory in the Union which has not at least one public normal school. According to the statistics gathered by the United States Commissioner of Education the public normal schools have been steadily increasing in number, in the number of their pupils, and in the amount expended for their support.

Every little while some critic comes forward and says the normal schools are no good, their teachers are incompetent and they are not accomplishing their pur-



pose. Benignant criticism is a good tonic. Malignant criticism is **an** instrument of torture. Normal schools are far from being perfect, and no one knows their deficiencies better, or feels them more keenly, than those who are doing the best work in conducting them.

The colleges at first took little interest in the normal school idea. The president of one of the leading New England colleges said at one time in my hearing, in a meeting of the high school principals of Massachusetts, when discussing the establishing of a chair of pedagogy in the college, "All one needs for teaching is knowledge. If one has sufficient knowledge, then he can teach if he has any ability for teaching. Any one can tell all he knows about teaching in half an hour. The college gives knowledge, therefore it has no need of a chair of pedagogy." But his college and many another college now has its chair of pedagogy. The demand for the professional training of teachers was too great to be ignored.

The main question now is how shall the purpose of normal instruction be best accomplished? The answer is, first, it is best done by schools whose sole purpose is the education of teachers. The purpose of normal school instruction is distinctly professional. No normal school department in any private or public school, no chair of pedagogy in any college, can fully accomplish the purpose of normal school instruction. It is too large a work, and too distinctive in its quality, to be shared by any other. It needs an institution wholly devoted to this one object, and fully equipped for this distinctive work. It demands the State normal school for the education of teachers for the common schools,

and the State normal college for the education of teachers for the public high schools.

Two prominent criticisms have been made upon the work of the normal schools. The first criticism is, "They have too much academic work and too little professional work." This criticism comes from the fact that so many normal schools make the unnatural and unphilosophical separation of their work into the academic study of subjects and the study of methods. The answer to this criticism is, make all the work of the normal school strictly professional. Study every subject and conduct every exercise in its direct bearing upon the teaching process.

The second criticism is that the graduates of the normal school have not sufficient breadth of scholarship. The criticism is true. They do not know enough to teach school properly. How many of us wise men remember how little we knew when we were at the age of these young normal school graduates? And we haven't yet passed beyond the need of more knowledge. The answer to this criticism is, extend the time of the course of study in the normal school and broaden the knowledge of the student teacher, and increase the salaries of public school teachers to a reasonable compensation for making more extended preparation.

There are five essentials in the training of student teachers which the normal school must supply.

*First*, It is essential that the student teacher should get the "professional idea" and become a genuine student of teaching; and be willing to do anything that will help him on in his teaching; that he may be inspired with the spirit of the true teacher who loves his work and loves to serve his pupils.

*Second,* It is essential that the student teacher shall study the elementary and high school subjects *anew* in the normal school, for two reasons; first, to increase his knowledge and power and to broaden his view. Second, he should study them anew that he may consider them from the teacher's point of view.

The student teacher should study each subject he is to use in teaching from three points of view: first, that he may know the essential facts and principles of the subject in their logical sequence,—this is the scientific view of the subject; second, that he may know why the subject is to be used in the teaching of his pupils,—this is the philosophical view of the subject; third, that he may know *how* to use the subject in the teaching process,—this is the pedagogical view of the subject.

*Third,* It is essential that the student teacher shall make a careful study of human nature, physical, intellectual, emotional, moral, and spiritual; to find the powers which are active in all men, the conditions of their normal activity, and the product of their exertion; and to find what is peculiar to the individual man.

*Fourth,* It is essential that the student teacher shall make a practical study of the child in the different stages of his development as he appears in actual life, out of the school and in the school.

*Fifth,* It is essential that the student teacher shall have ample observation, under intelligent guidance, of the workings of all the grades of a good public school; and when he has some just conception of the nature and method of true teaching, and when he has become acquainted with his pupils, that he shall have sufficient practice in teaching, under such supervision as he

needs, to place him firmly on his feet as a teacher before a school.

The normal school idea has focused the thought of educational thinkers upon the nature and scope of public school education; upon the study of human nature to discern and state the principles of education; upon the aim, motive, method, and product of the process of teaching; upon the principles of school government; upon the practical study of the child; upon the adaptation of the course of study to the living needs of the pupil; upon the topical arrangement of subjects for teaching, study, and class exercises; upon the proper heating, lighting, ventilation, sanitation, and decoration of school buildings; in short upon every phase of the professional training of teachers.

The present condition of the normal schools of New England is the product of all the struggle, thought, toil, sacrifice, consecration, faith, hope and ability that has been given to these schools in the past. All the history of this past gives strong assurance of future progress. We have only to emulate the example of their founders to carry them on to the full accomplishment of their mission.

The normal school is still in its youth, and is working its way onward to a vigorous manhood. God speed the day when the whole vision of the Prophet shall be fulfilled in regard to the teachers of the land,—"And the breath came into them and they *lived* and stood upon their feet an exceeding great army."

DISCUSSION OF THE QUESTION: "THE  
INCREASING DIFFICULTY OF SUPPLY-  
ING THE DEMAND FOR GOOD TEACH-  
ERS.

ELLA L. SWEENEY, ASST. SUPERINTENDENT OF SCHOOLS,  
PROVIDENCE, R. I.

There is a shortage of teachers in the schools to-day for the following reasons: First. Longer and more expensive preparation is required of those who would be teachers. The teachers in the grades to-day must have a reasonable acquaintance with all departments of knowledge which contribute towards the life of the child. Effort of the most serious character is demanded. Requirements have increased until to-day only those possessed of a vigorous physical constitution and a strong purpose are able to secure the preparation. There is a great demand upon the nervous energy of the teacher. There must be constant alertness and unbroken strain.

Second. There is a lack of social recognition. This question of quality and position of teachers is a present day problem. Low wages put the teacher at a social disadvantage. She cannot afford a social standing. She cannot afford the time, strength nor clothes necessary. She is too tired, too poor to occupy a social position.

Third. There is a lack of financial recognition. The compensations presented do not tempt to the teaching profession. The teacher should be paid enough so she could have good literature, art, music,

see theatrical representations, fine scenery, mingle with the world's best people, see other lands. She should be paid enough so she could continue her study, so that her confidence could be strengthened, her personality be broadened and her life refreshed. She should be able to take advantage of all proper opportunities for self-improvement. There should be a living wage increasing with age and experience.

Fourth. The conditions of appointment do not attract. There should be appointment and promotions by some means that should stimulate the teacher's efforts and preserve her self-respect. Political influences are disposed to meddle. We should devote our energies to securing legislation that will expel the politician.

Fifth. Other professions are freer from absurd and petty exactions in the matter of mechanical uniformity and routine.

Sixth. Tenure of office for teachers during good behavior and efficiency is expedient and desirable.

Seventh. There should be a pension when age and infirmity render the teacher no longer able to perform active service.

Eighth. The teacher must be recognized as an educator and accorded a voice in decisions of educational policy.

When these conditions have been met, then and then only shall we have drawn to the teaching profession, women of the right mental calibre.

## FURTHER DISCUSSION OF THE ABOVE SUBJECT.

F. H. BEEDE, SUPERINTENDENT OF SCHOOLS. NEW  
HAVEN, CONN.

Every year it is becoming more and more difficult to secure satisfactory teachers. This is due to two causes: First, the growing demand for better teachers, and second, the opening up of a large number of positions to many young women who would otherwise become teachers. A generation ago teaching was about the only occupation which was attractive to self-respecting young women. This is entirely different now and it is safe to say that there are scores of occupations which are competing with teaching for the services of reputable young women. This is especially true of all lines of commercial work. Only a few days ago a Superintendent of Schools in a New England town told me that a young woman who had just graduated from the Commercial Department in his High School entered a business office the following week at a salary of Fifteen Dollars a week, while one who was to become a teacher expected to get not more than seven or eight dollars a week. This situation is one that exists practically in many places. It is largely a matter of supply and demand. Commercial positions are paying very good salaries, while teachers' salaries, except in the larger cities, are generally low. In the long run, people get what they pay for. Leaving out those exceptions which exist to every rule, you cannot secure competent teachers at Seven Dollars or Eight



Dollars a week. The practical lesson from all this is that our Normal Schools should make every effort to send out into the teaching profession a class of well trained, well educated and cultured young women; that the salaries of teachers should generally be increased; and that school committees should make all the conditions for the teachers' work such as to attract into it the best class of young women.

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### GENERAL SESSIONS.

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#### EDUCATION FOR LEADERSHIP.

WALTER BALLOU JACOBS, BROWN UNIVERSITY,  
PROVIDENCE, R. I.

The study of mob-psychology—the way in which men act in crowds—has been a fruitful field alike for psychological and for sociological investigation. The phenomena for which an explanation is sought are by no means new or only recently observed. Panic fear took possession of ancient armies just as panic seizes speculators in the modern stock exchange. Such acts of men are unreasoned, though not by any means always unreasonable. Men are brave and generous, as well as cowardly and selfish, by a common impulse. The Greeks gave such acts a mythological explanation. They spelled Panic Fear with capital letters, believing that a spirit passed over men and possessed them. It remained for M. Tarde to show that the real explana-

tion is to be found in imitation. Men are vastly more susceptible to imitation, especially unconscious imitation, when they are in large bodies and in close contact. Modern life, with its trolley car, telephone and daily newspaper, has brought man into close contact, and has made millions as susceptible to imitation of a single leader as hundreds or thousands were in ancient days when crowded together in an army or popular assembly. The virtues and vices of modern society should be spelled with capital letters, not because they are deities, but because they are virtues and vices of society as a whole, rather than of individuals acting separately. Imitation implies someone who is chosen for imitation. Such persons society calls geniuses or leaders. The progress of society depends upon the capacity of its leaders to lead wisely and the capacity of the many to imitate or assimilate well.

Education as a social institution for the good of the many must produce these two classes of men. In producing excellent followers and assimilators education has been remarkably successful. In producing geniuses or leaders education has been doubtful, uncertain and sometimes hindering. And yet this work, the more difficult of the two, is surely of equal importance for social progress. To attain better results the schools must not treat all pupils alike, but they must select those most promising in capacity for leadership and give them especial training. They must provide teachers who are themselves leaders. The startling and rapid feminization of the teachers in our schools does not tend to produce boys with virile spirit of leadership. Boys who are capable of becoming leaders must come in contact with men who themselves have the spirit of

leadership. If our nation is to have wise leaders the schools must emphasize the responsibility of leadership. The true leader is not one who is victor as a competitor among equals, but one who advances himself and draws others up to him. He is a shepherd of the people. Our people are in dire need of such unselfish leaders. The schools as a social institution should produce them for society.

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### THE NECESSITY OF ORGANIZING CONTEMPORARY EDUCATIONAL EXPERIENCE.

PAUL H. HANUS, HARVARD UNIVERSITY.

About twenty-five years ago we began in earnest to improve our narrow and formal elementary school programs of study, consisting chiefly of reading, writing, arithmetic, English grammar and statistical geography, by "enrichment;" and our equally narrow single high school program, consisting chiefly of Latin, Greek and mathematics, by the addition of semi-classical and non-classical programs.

This has led to some intelligent experimenting, much unintelligent imitation, and very general confusion, some congested programs, and not infrequently, scrappy and superficial work.

About fifteen years ago we began also to realize that the organization and administration of our town and city school systems had outgrown the simplicity and efficiency of earlier days; that the organization was often cumbersome, and wise administration of school affairs hampered and obstructed by the obsolete system

of organization then and still quite generally in force; and that both too often lent themselves to spoils-hunting politicians and other self-seekers. During the past dozen years, or more, thoughtful teachers and laymen have been earnestly endeavoring to secure improvement by a transformation that should adapt the existing organization and administration of schools to the changed conditions of the present day;—to do this chiefly by the centralization of responsibility and authority in the hands of paid experts, responsible to Boards of Education or School Committees, and by the restriction of the duties of Boards of Education or School Committees to legislative functions. Progress in these matters is, however, very slow; because it is difficult to wrest power that has been and is always liable to abuse from those who have exercised it; because teachers, school officers, and especially the general public do not clearly see the immense harm in bad organization and administration; and because many are not convinced that the proposed schemes for the re-organization of city school systems must tend to remove the evils from which we suffer.

Accordingly, we are at the present moment, lost amid questions of what is a good course of study in history, mathematics, nature study, and the rest; what is a good program of studies—*i.e.*, what should be its scope, the sequence and distribution of the studies and activities provided, and how much time should be spent on them?

We are also lost amid questions of organization and administration. One city does this, another that; and no one is prepared to prove by an array of incontesti-

blé facts just what the present evils are, or how the newer organization and administration tend to remove them.

I. The contemporary condition of school programs is shown by the statistical tables A, B, and I to XI. (Table A is taken from the Report of the U. S. Commissioner of Education, and shows the subjects studied in the elementary schools, together with the time devoted to those studies in twenty-one cities of the U. S. in 1888-89. Table B is compiled from reports prepared by the U. S. Commissioner of Education for the Pan-American Exposition, in Buffalo, in 1900, and shows the same things as table A for 18 cities. The remaining tables, *i.e.*, I to XI were worked out by the students in the Seminary in education at Harvard University during the past year, and in various ways show for the present year the same facts as tables A and B for ten cities. [Boston and neighboring cities, and New York City.]

These tables accordingly show: 1, The scope of elementary instruction in the cities chosen, and are fairly typical of the cities of the country. 2, Variations in time allotment for the same subject in different cities. In some cities certain studies receive three or more times the time devoted to them in others.

II. The study of these programs gives rise to the following questions: 1, If the maximum percentage of time is necessary, how can the minimum percentage be justified? 2, If the minimum percentage is adequate, why waste the pupils' time? Hence: 3, How shall the requisite amount of time be determined? This can be done as follows: *a*—Determine or agree on what should be done, accomplished in each study.

*b*—Agree on concerted experimenting over a sufficiently wide area and for a sufficiently long time.

III. The diversity in the organization of city school systems is as great as the diversity in programs of study. They are:—

*a*—Large Boards of Education.

*b*—Small Boards of Education.

*c*—Many Executive Sub-Committees and limited powers of the superintendent.

*d*—No Sub-Committees or few Sub-Committees and large powers vested in the superintendent.

Which is best? We have no authoritative information on these questions. We have occasional reports of individual experience, but no comprehensive and *convincing* reports as to just how these different schemes of organization and administration actually work. For example: Questions like the following constantly come to my desk—For what should the superintendent be held responsible? For what the Board of Education? Who should select the textbooks? Who should determine the course of study? Who should have the determining voice in selecting and rejecting teachers? What are the best ways in which a Board of Education can determine the character of the work done in school? At present such questions cannot be answered save from the standpoint of individual experience and observation. Such answers necessarily lack the convincing force which they ought to possess.

IV. To secure the comprehensive, and if possible convincing information needed on these questions concerning programs, and organization and administration, the National Department of Superintendents of

the National Educational Association appointed a Committee of eleven on the Organization of Contemporary Educational Experience. This Committee has developed the following plan of work:

A. To study four phases of contemporary educational experience as related to one another, and to that end to collect and classify data as follows:

1. Facts concerning the organization and general administration of town and city schools and school systems in a considerable number of cities and towns.
2. Facts concerning teachers, namely: Their training, improvement, promotions, salaries and pensions.
3. Facts concerning programs of study, namely: Scope or content, distribution and time allotment of the various studies from the kindergarten through the high school.
4. Facts concerning the classification and promotions of pupils.

B. To disentangle from these facts of experience contemporary principles of administration, and contemporary aims and tendencies; and to suggest the testing or verification of these principles, aims and tendencies by concerted experimentation over wide areas for varying but considerable periods of time.

The Committee hope to secure the desired facts as follows: (1) By appointing Associate Committees, or by securing the appointment of such Associate Committees, through local or state organizations. These Committees to secure the desired information on the basis of questions and outlines prepared by the Committee of Eleven. (2) By appointing or secur-



ing the appointment of Associate Committees of Laymen (persons not teachers) to secure desired facts as before. (3) By employing a representative of the Committee of Eleven, who shall pursue his investigations under the direction of the Committee.

V. This Committee will accordingly attempt to achieve the following results:

- a*—On the basis of well attested facts of experience (which are themselves of great value to superintendents, principals and teachers, professors of education in Normal Schools and Colleges, and all other workers in the field of education) to promote the clear formulation of contemporary educational problems. This formulation is the first step toward progressive solutions of these problems—Solutions based on a progressive insight into clearly defined and deliberately planned educational procedure.
- b*—To make a contribution to the method of investigating educational problems. While this method can be developed in detail only as the work proceeds, the Committee expect to show that it consists in (1) ascertaining incontestible facts; (2) the provisional formulation of the principles, aims and tendencies embodied in these facts of experience; and (3) the testing of these principles, aims and tendencies by concerted experimenting on the part of those whose business it is to carry on the work of the schools.
- c*—Finally, in this way, the Committee hope to promote the development of our incipient Science of Education. They hope to help in bringing about the time when educational practice will be conspicuously based on the ascertained needs of the

individual and of society; and on the equally well ascertained possibilities of achievement under the varying conditions of contemporary life.

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### THE WOMAN'S CLUB AS A FACTOR IN EDUCATIONAL PROGRESS.

MRS. MARY I. WOOD, PRESIDENT OF THE NEW HAMPSHIRE FEDERATION OF WOMAN'S CLUBS.

An eminent educator recently said: "When the history of this period comes to be written, it will be recognized that from 1870 to 1900 was a period of greater significance than any former two hundred years and out of that whole time of thirty years that which will be recognized as the most significant, the most far-reaching, will be the movement that is represented by woman's clubs."

As one thinks of the great ethical movements with which the modern world seems filled to overflowing, the many churches of all denominations, the great colleges and universities, the vast net-work of the public school system, the fraternal and beneficent organizations, it would not be strange if he were inclined to doubt that the woman's club movement exerted an influence greater than any other. Indeed, if I were asked to point to any considerable work which the club, unaided, had accomplished for education, to show any great institution which owed its existence, either from a financial or educational standpoint, directly to the woman's club, to disclose any radical changes in

methods of teaching which had their rise in the deliberations of the club, it might be difficult for me to do so.

Up to the present time, the work done by the great organization itself is a work of subtle forces rather than of positive changes. It is not initiative work but strengthening work. Women have not been and probably never will be to any large extent leaders or generals in great undertakings but they have done and will ever do wonderfully good work in improving the ranks and they are unexcelled as under-officers.

The wisest and best clubwoman realizes the different functions of the man and the woman and in her work for a better world she does not usurp the domain of man. She has learned from the history of the world that the woman, in whatever sphere, has ever the same function to perform. She knows that man has been and will be the warrior, the explorer, and the inventor but she knows also that after the battle is begun, after new fields are entered, after new inventions are brought forward, there is still great need of hands to do the detail work. The good in all these lines must be preserved and conserved and she knows that she is the one who can help to do it.

In the early days of the woman's club, the movement was most often characterized, and with some degree of correctness, as the "middle-aged woman's university." The whole trend of the early clubwork was toward the self-culture of its members. The great change which the inventive genius of man has wrought in the domestic life of woman had divided that which, hitherto, had been one great class into three distinct classes.

First, that class of women who, because of the necessity of adding to the wage-earning capacity of the family, have been forced to follow their work as it went out of the home and, to-day stand behind the counters in our stores, at the looms of our factories, at the machines in our workrooms, in our hotels and in our shops, everywhere in this world where woman's work may be found. With rare exceptions, these women are no more able to aid materially the educational progress of the world than were their grandmothers whose entire day was given over to the brewing and baking and fashioning of garments for the large family within the home, since the average woman worker of today uses all her energy, mental and physical, for the furtherance of her employer's interests and the maintenance of life itself. Second, that class which is composed of women to whom fortune is most kind. Because of the increased contents of the coffers of husbands and fathers, they are not forced to add to the wage-earning capacity of the family, but on the other hand may choose to a great extent the way in which both time and money shall be spent. Seeing, then, this opportunity for a broader pursuit of personal pleasure, they have enlarged their homes, multiplied the luxuries of life, and have entered upon a round of social duties which leave no time for the real problems of life. From this class hardly more than from the former do we find those who devote themselves to the betterment of existing conditions.

Third, between these two classes, there stands a great throng of earnest, active women who are neither forced to earn their daily bread nor are they willing to

devote themselves purely to the pursuit of personal pleasure. These women realize that an increase of ease and comfort means also an increased responsibility for the way in which they are to meet their changed conditions and the first question which they asked themselves, after their eyes had become somewhat accustomed to the growing light of freedom was, "In what way can we become most useful in this new universe in which we are to live?"

Woman had learned motherhood, and beauty, and cleanliness before she entered her new life. Some people still assert that all her work for education and philanthropy, grows out of her knowledge of motherhood and all that the term implies; that all her devotion to art and civics and forestry is but the natural outlet of her love for order and beauty. But be that as it may, she soon found avenues unexplored and she formed with others of her kind, study classes, and gained what help she could from research and discussion. These study classes have been the means of developing and training many a mind which would otherwise be still dwelling on petty neighborhood differences.

But the self-culture club, the exclusive club of ten or fifteen years ago where twenty-five or thirty chosen women met and discussed matters in which they alone were interested, the club that was a semi-social affair and which only those women who were socially congenial were invited to join, is fast disappearing and the best clubwomen are bidding it a glad farewell for in its place there has arisen the inclusive club whose watchword is service to humanity.

What part has the woman's club in educational progress?

For improved school conditions the club has shown great activity and many a kindergarten, manual training and domestic science room owes its existence directly to the clubwomen.

Each state federation of women's clubs has a well-organized Educational Committee who are bending every effort toward the betterment of educational conditions in their state. In New Hampshire the Educational Committee is devoting itself to securing the lengthening of the school year in rural districts, the increasing of the number of public school superintendents, and the assisting of New Hampshire girls to a higher education in normal schools, in domestic science schools, and in colleges.

Everywhere women are awakening to the fact that, if we are to have women as teachers and girls as pupils, if we are to expect from school boards any supervision over the sanitary conditions of the school houses, if we are to have school rooms and grounds made beautiful and attractive, we should have on our school boards women, as well as men, who can and will devote time and thought to these matters. Women are beginning to realize that they too are responsible for the improper educational conditions wherever they prevail and already they are working to make them right.

A great movement in charge of the joint committee of the Collegiate Alumnæ and the Federation of Women's Clubs in Massachusetts, aims to secure the most efficient teachers possible for the salaries paid, regardless of their place of residence at the time of

appointment. General Federation of Clubs is making a strong campaign for better child labor laws. The General Federation also urges the establishment of juvenile courts and the probation system for youthful offenders and uniform legislation in all states and territories for the protection of children.

A significant feature of our work is the education of the adult population by means of lecture courses, open to the public. In almost every town, regardless of its size, where a woman's club has been organized, the lecture course is an annual feature of the work. It varies in usefulness and scope, according to the size and financial standing of the club, from a course which presents the best lectures in history, science, literature and art to the course which simply employs the local clergymen or the officers of the state federation. But, be it the broader course or the more restricted one, the club is still the means of extending its educating influence and the magazines and the newspapers, the encyclopedia and the public library become each year more and more the intimate and appreciated friends of the people because of the awakening of an interest by the lecture course of the woman's club.

Another means of educational progress which owes much to the club movement is the Traveling Library. One of the most interesting exhibits at the St. Louis Biennial was a fully-equipped circulating library. In this way thousands of books are to-day going from town to town all over the United States, sent out by women of the different federations. Massachusetts alone sends out five thousand volumes. Maine, whose work has been recognized and adopted by the State,



sends out five thousand more. Many other state federations are doing this work with marked success.

A very important work for education which is being vigorously pushed by clubwomen is the Arts and Crafts movement which is endeavoring to teach the great public to recognize good workmanship and to love simple and beautiful handiwork.

Forestry is already in the list of club interests and in many states the work done by the Forestry Committee has been the means of arousing the people to a keener appreciation of the beauty and value of the forests. This department is also teaching that Art is no longer a thing to be sought only in museums and in the homes of the rich, that Art may be out of doors as well as in doors. More and more is the knowledge spreading abroad that, wherever beauty appeals to the soul, touching life with an upward impulse, whether it be in the painting on the wall, in the bit of finely chiselled marble, in the neatly trimmed lawn, or in the grandeur of the forest, there is Art in its best and highest sense.

Everywhere the club movement is touching the industrial question and the working woman and child have become the especial charge of the club woman. Factory inspection, health inspection, day nurseries, evening clubs and classes are in many states the direct result of investigation and labor by clubwomen.

Civil Service Reform is counting among its advocates a few of the most advanced clubs and state federations.

The Legislative Committees of the various state federations are asking each year for better laws relating

to higher standards of morality, education and industrial life.

But the best and highest work which the club has done for education or civilization has been to teach each member and the world at large the true value of the individual. The club movement has been and still is a great leveler and no church exists to-day that has been so successful in its work for real Christianity as exemplified by the Golden Rule as the woman's club, which knows neither creed nor color but asks simply that each be of use according to her ability.

That the club movement is impetuous and crude at times and sometimes even impractical in its plans, the club women admit; but the wisest leaders know that their best work must be done as auxiliary and supplemental to that done by men along the same lines and the club committees who are to-day doing the most valiant service are working with the advice and co-operation of the men at the head of similar lines of work.

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### ATHLETICS AND ETHICS.

ALFRED E. STEARNS, HEADMASTER OF PHILLIPS ANDOVER  
ACADEMY.

Let me say at the outset that I am a firm and an enthusiastic believer in school and college athletics. I pity the schoolmaster who sees in athletics only a necessary evil, which he would gladly do away with if he could, and who does not recognize in them an efficient safety valve for youthful spirits and a splendid moral force in the life and administration of his insti-

tution. But athletic contests are coming to be regarded more and more as an end rather than a means. Questionable methods have become lamentably common. Players early are taught that skill in disregarding rules is a prime requisite of a successful athlete. And the worst feature of this lamentable situation lies in the fact that it is largely graduates of our leading colleges and universities who are engaged in this demoralizing business.

In the secondary school this evil is most insidious and most to be deplored. To the average schoolboy the college athlete is a veritable hero. His word is law. And this man, often, I regret to say, passes his time in instructing his pupils in the arts of deceit and dishonesty. I have seen many a college athlete coach devoting his time to teaching his young followers how they may cleverly disobey the rules of the game without risk of detection, and I think that I am safe in saying that the majority of coaches are more or less given to this business.

There is another demoralizing phase of the present athletic situation. The athlete has come to occupy altogether too important a position in the eyes of his fellows. He is led to overestimate his real worth. The preparatory school is the greatest sufferer in this respect. In their eagerness to attain success, the colleges early canvass the secondary schools for material. The various college representatives vie with one another in offering to young and susceptible boys all sorts of attractive inducements to lead them to choose given colleges. Arguments are advanced to show the uselessness of completing the regular preparatory courses, when entrance to college can be earlier and

more easily secured. So persistent and widespread has this practice become that it is often extremely difficult for any school of good standing to hold boys of athletic ability to the full completion of its regular course. The college should unite with the school in putting a stop to the demoralizing practice of proselytizing.

I have no patience with those who most loudly protest against the physical dangers of football, who busy themselves with the framing of eligibility rules whereby scores of honest, deserving students are debarred from the privilege of representing their school or college on the diamond or gridiron; who regard summer ball playing as a horrible crime and who would restrict American athletics to an aristocratic or leisure class. The gravest dangers are of another sort. Certain elements of roughness should and no doubt will be eliminated. The real professional element must be debarred. But the present agitation has sadly missed its mark, and while I sympathize with the motive of some of these would-be reformers, I am getting to sympathize less and less with their methods and even with the end they have in view.

Existing conditions furnish strong temptations to boys to deceive and to misrepresent. The restrictions are felt to be in a large measure unjust. And boys are taught that undetected deception in games is a commendable thing. Hence they are not likely to adopt a wholly different standard when their own personal interests are involved. One or two simple rules by way of understanding may be desirable, perhaps necessary, but the fewer the better. If we consider our rival a worthy foe, surely we can trust him to do the square thing. The senseless and disgraceful wran-

gles which are constantly taking place between our higher institutions of learning over the question of their athletic relations are a disgrace to the institutions themselves and a menace to their influence. We need less "red tape" and more common sense and mutual confidence.

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### ETHICAL ELEMENTS IN EDUCATION.

E. HERSHEY SNEATH, PROFESSOR OF PHILOSOPHY,  
YALE UNIVERSITY.

The æsthetic element in human culture has not received and is not receiving the attention on the part of educators that it deserves. This has been due undoubtedly to the fact that in the development of man the physical, social, political, intellectual and moral needs come first. Again, the utilitarian character of our civilization has not failed to affect our educational work and on the surface at least the æsthetic does not seem to make for utilitarian ends to a very great extent. But in the third place, this neglect of the æsthetic has been and is due to a failure to appreciate fully its importance as a factor in human nature and human unfolding. A little careful examination will show that this element is one of the most important and most powerful factors in the complex nature and life of man.

In the first place man is constitutionally æsthetic. The universality of the æsthetic as manifest in the history of man testifies to this. A true psychological analysis also reveals it.

In the second place the æsthetic is a very influential factor in the unfolding of human nature. It plays a prominent part in the unfolding and development of the physical, social, industrial, political, intellectual, moral and religious life of man. [This point was developed at length.]

In the third place, the æsthetic is a very important factor in its relation to the daily life of man as measured from the standpoint of joy and sorrow, happiness and misery. It is a prolific sense of enjoyment. The beauty of nature and the fine arts testify to this fact. It also alleviates human suffering.

An element in human nature so conspicuous and important as the æsthetic calls for careful recognition and attention on the part of the educator.

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## PROBLEMS AND SOLUTIONS.

HON. CHANNING FOLSOM, STATE SUPERINTENDENT OF  
PUBLIC INSTRUCTION, CONCORD, N. H.

The educational problems of northern New England are those linked with the rural school and are incident to the changed conditions since our schools were established and our method of management inaugurated.

The changes in our industrial conditions, the shifting of our population, the segregation of wealth and population resultant from the establishment of the factory system have brought into prominence certain questions not heard of by our forefathers.

Though the school has been always demanded by the state for the welfare of the state, its management and

its financial support have been left to local decision. This plan originally worked well for the reason that wealth and population alike were evenly distributed. The economic and industrial changes of the last century, however, have brought about marked inequalities.

The aim of educational legislation in this state for the last twenty years has been the correction of these inequalities. The legislature has constantly sought to place country children, as far as practicable, on an equality with those growing up in the villages and cities.

Note some of the more noticeable of these inequalities still existing in New Hampshire. In 1903 the taxable valuation of the town of Ellsworth for every child of the average attendance at its schools was \$1,358; that of Dublin was \$18,639. One was nearly fourteen times as able to educate its children as the other. But the school tax in Dublin during the same year was \$1.95 on \$1000; in the district of West Lebanon, \$10.62 or nearly six times greater. In considering the ability of any community to support its schools, we must take into account its other burdens. When we take into consideration the additional fact, that oftentimes the towns having the shortest schools and paying the lowest salaries are among those that are the most heavily taxed both for school and general purposes, we are forced irresistibly to the conclusion that the revenue for the support of the public schools must ultimately come from the state treasury. The school tax must be levied by the state on all property and distributed in direct proportion to the number of children in average attendance and in inverse proportion to the valuation



per child. New Hampshire has a small annual appropriation of this kind now, distributed to a limited number of towns. The method of distributing state school funds too often ignores the fact that to solve the problem of supporting schools in the smaller and poorer towns, the entire commonwealth must be considered the unit and so taxed that the rich may help the poor. To distribute a state tax according to valuation affords no relief to the poor town; to distribute such a tax according to the population, the number of inhabitants under a certain age, or the number of pupils enrolled in the schools, is as likely to work injustice as justice. Valuation and school attendance should both be influential elements in such distribution.

More money to the towns would not of itself solve the educational problem. A proper expenditure of money is as important as increased resources. To provide the one without assurance of the other would be most unwise. Those familiar with conditions in the rural town where the schools have not expert supervision will probably agree that a very considerable percentage of the money used is wasted.

A state tax as proposed would tend to equalize salaries, and to increase them all along the line. According to the last published report of the department of public instruction of New Hampshire, the average wages of women teachers below the High School grade, including board, was \$29.11 per month; fifty-five (55) towns report a sum not exceeding \$25.00 a month, the lowest being \$13.50. These towns all desire the best teachers that can be obtained. Thus the great problem of the day is how can a ten-dollar teacher be secured for five dollars or less; for this I

can suggest no solution. More money must be available in some way in order that more efficient teachers may be placed in charge of our schools. But paying more money will not of itself make better teachers. The public must demand better work. When demanded, it will be forthcoming. But the demand for trained teachers will at once create a new problem: *vis.*, where will the supply come from? Last year 524 of New Hampshire's teachers were reported as teaching for the first time; the same year our single normal school graduated about 50; the city training schools increased the number of trained teachers somewhat, but it was still a small fraction of the number of new teachers demanded. This state must provide in the near future more schools for professional preparation.

Money is needed not only for the payment of teachers but also for better buildings, better sanitation, better ventilation, apparatus, books, supplies. Many of our high schools are teaching science with no laboratory, no apparatus, with a text-book only. Many of our school boards are requiring text-books to be used until they are mere shreds and rags from legitimate and illegitimate use.

The changes in occupation and the drift to the cities have almost depopulated some of our rural towns. The schools have decreased in size, and, demanding no great executive ability or disciplinary power on the part of a teacher, but little real teaching is done in them. In 1903, of our 2166 public schools 425 ranged from six to twelve pupils; 118 contained fewer than six pupils each; 543 schools—more than one-fourth of all in the state, had twelve children or less in each. It would seem that a little business judgment would call

at once for the consolidation of many of these into neighboring schools, enabling school boards to secure better service and better equipment.

The solution of this problem will come in many towns by the establishment of a central school, properly graded, to which the children of the town will be conveyed at public expense.

The elimination of the small school, however, is by no means an easy thing. It presents many difficulties to the practical man as he becomes familiar with the rugged, natural features of our hill towns and the rugged human inhabitants thereof. The latter may be softened by a proper and tactful method of presenting the subject, the former frequently present insuperable objections. What matter if schools are but three miles apart if the mountain road connecting them is impassable for half the year! But even when there are no physical barriers, the people advance many objections which seem valid to them and which are entitled to consideration.

The objections usually raised are,

1. Depreciation of farm property.
2. That it is too hard for small children to take a long ride twice a day.
3. Necessary lack of parental care at noon intermission.
4. Irresponsibility and unreliability of persons employed to convey.

I pass over the first point as not relevant to the object in establishing or maintaining the school.

On the second point it may be said that it is easier for the child to ride three miles in a proper convey-

ance than to walk one in inclement weather or "mud time."

The third objection is legitimate. If children are taken from home by the school authorities and kept for the day, these authorities should realize their responsibility for taking proper care of them. When carried to the village school, they should not be left to roam the streets or to spend their time in the grocery store. When collected in considerable numbers, a matron should be employed to take charge during the absence of the teacher. The physical and moral welfare of the child demands this, as well as a proper care of the school and school property.

The fourth objection is a vital one. None of us would entrust our little ones to the care of a drunken driver whether to take them to school or to a picnic. That school board is derelict to its duty, that consolidates schools without regard to the rights of parents and the comfort and protection of the children.

The advantages to be obtained from discontinuing small schools and conveying children at the expense of the district are,—

1. Economy.

Transportation can be performed, usually, at less expense than a good teacher can be employed, and the money thus saved may be applied to making the enlarged school better in furnishings, equipment, and teaching.

2. Better teachers and equipment.

The best teachers cannot be induced to accept positions in the three-scholar or the five-scholar schools, even when public sentiment allows the school board to seek for them with the offer of sufficient salary. Con-

solidation enables the board to pay better wages and hence to employ better teachers.

Consolidation, by lessening the number of schools to be visited, enables the supervisor, school board, or superintendent, to make more frequent visits and to get into closer touch with pupil and teacher.

With a comfortable and regular conveyance, the weather, temperature, and bad roads cease to be important factors in causing absenteeism.

The pupil of the small school lacks that emulation and competition so essentially necessary to progress, which will be afforded by the larger school. This is true even when the teachers are equally competent. It has double weight when we consider that the better teachers are almost uniformly in charge of the larger schools.

Many towns are so situated that all children of the same town cannot be brought together, but some section can more conveniently be associated with a neighboring town; in such case town lines might well be disregarded and a graded school district be formed without reference to town lines. Under the state-tax plan, this would not complicate matters.

The greatest problem is the supervision of the rural school. Massachusetts has solved this problem in such a satisfactory way as to make her an example to be imitated. Her system of district supervision on the whole seems to be the best yet devised. Her sister states are trying to profit by her experience. In most of our towns, however, supervision by school boards is the only oversight given to the schools. It is not generally claimed by members of those boards that by virtue of election, they immediately become education-

al and pedagogical experts. The more competent they are, the more likely to demand of the people authority to unite with boards of other towns to form a supervisory district.

All the reforms suggested depend upon public opinion for their consummation.

Good schools cannot be forced upon any New England community from the outside; they will come, if they come at all, from an enlightened public sentiment which demands them and which will accept nothing less; they will come to any community whenever the controlling influence insists upon them, whether that control is made manifest by a majority vote or a predominant intellectual power.

The solution, then, of all our problems depends upon interest and enlightenment of the people. This view brings to us a question almost appalling: How may the people of any town, of any state, be brought to realize their personal responsibility for the schools? To the accomplishment of this end, every teacher, every superintendent, every one connected with educational work, should constitute himself or herself a missionary: every such one must remember that his duty is not fully discharged with the completion of the immediate school room work. We owe a duty to the state as well as to the local community. Individuals should be enlisted, organizations should be interested. We must aim to unify all the educational forces to the end that every citizen be aroused to an understanding and appreciation of the obligation of the citizen to the school.

## LITERATURE IN ELEMENTARY SCHOOLS.

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There is much less idle marking of time in modern schools than there was in schools of twenty years ago. Children, as a rule, read well at a much earlier age, and the child of today reads ten times as many pages of good literature before he reaches the high school as his father had read at a corresponding age. As a consequence of the improvement in methods of teaching, teaching appliances, and text books, the average grammar school graduate of today knows as much about literature, science, history and the life of the world as an average high school graduate of twenty years ago. This large improvement has not been brought about without some loss. Classics in art and literature that are beyond the comprehension of the ordinary child have been forced upon him before his life experience has fitted him to appreciate or understand them.

Not that the literary diet of a child should be limited to what he can understand—no one who knows children could advocate that—but *some* things should be allowed to wait until the time for their presentation is ripe. Browning makes but a poor substitute for Mother Goose when one is reading to a five-year-old. Stevenson passes muster with a child of six years because Stevenson never grew up; he was always the big boy who liked to steal away from his adult companions in order to play pirate with the other lads under the table. Shakespeare for the child of six is



another matter. His message is for the more mature mind and there is very little in his verse to which the young child responds.

Children are a constant temptation to their instructors. So much *can* be done with them—they are such wonderfully adaptable material for experiment. An enthusiastic teacher may be able to interest a child in the paintings of Corot, but the interest can be no more than transitory—the mere temporary effect of a contagious enthusiasm. When a little child looks through a picture book for his own pleasure he usually skips the pictures that his elders think he ought to enjoy and dwells lovingly upon those that express action, appeal directly to his crude sense of color, present familiar objects in new or unexpected relations, and those that approach the grotesque.

The picture that tells a story which he can understand is the one that is dear to the heart of a child. As his experiences multiply his taste in art is gradually modified until Corot and Raphael make their own direct appeal to something within him that understands.

To withhold from a child the picture that he enjoys while forcing upon him one that has, as yet, no special interest for him, is to risk depriving him in later life of the power to appreciate the beautiful thing with which he too early became familiar.

In Literature, as in Art, we are face to face with this danger, and we may grow as weary of "The Vision of Sir Launfal," as we have grown of "St. Cecelia."

Teachers in our secondary schools and in the higher grades of the elementary schools complain that they

are feeling the lack, in their Literature classes, of the vivid interest that pertains to the unknown and the unexplored.

In a kindergarten of which I know, children four years of age are taught the selection from the "Vision of Sir Launfal" beginning "What is so rare as a day in June?" It is often well to give young children a taste of poems that they cannot appreciate in toto, but there are surely more suitable selections than this upon which to exercise the memories of kindergarten children. For the poem as a whole even fifth grade pupils are too young. Ten-year-old children, as a rule, will entirely miss the ethical lesson summed up in the lines,

"Who gives himself with his alms feeds three,  
Himself, his suffering neighbor and me."

I have found, however, that it enhances rather than detracts from the interest shown in some poems if the children have had the story of the poems told to them some time before it is read to them or by them. "The Pied Piper of Hamelin" may be told many times from kindergarten through second or third grade, and "The Leak in the Dyke," "The Legend of St. Christopher," "The Bell of Atri," "Hiawatha and Snow Bound" are more thoroughly enjoyed by children if the story is familiar to them. We need have very little fear of "wearing out" a story that possesses intrinsic interest for children. Verse may become hackneyed and lose its charm, but a favorite story can scarcely be too often repeated.

An ideal course in Literature should include, for young children, some of the world's best folk lore

and mythical tales, true stories of birds and beasts and people, a sprinkling of Mother Goose, and a goodly number of short poems that have stories bound up in them, together with a few that will be enjoyed because of their rhythm. In making selections preference should be given to such poems and stories as touch the child's experience at some point. Later in the course the ideal in life and conduct should have a place, and such selections as emphasize the homely every-day virtues.

There is enough and to spare for every grade, and not all the *good* things were written in the days of our grandfathers. There is much in modern and contemporaneous Literature that will bear comparison with the classics. Nothing finer, of its kind, can be found in any age than Victor Hugo's picture of the gentle shepherd of souls whose love for mankind so greatly exceeded his love of self.

With the old and the classic the wise teacher will combine that which is best in modern Literature, seeking to guide, not force, the child in his choice of intellectual food.

To cultivate a love for the best in literature, to reach the feelings with the refining influence of story, poetry and song, to open to the victim of unfortunate circumstances a door into the land of happy self-forgetfulness, to increase the sum total of the world's joy—this is the mission of the public school teachers who have at their command the wealth afforded by our public libraries.

## TWO FACTORS IN SOCIAL PROGRESS.

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The study of history need not be extended nor profound to reveal two forces acting through all past time toward social betterment.

One of these forces, individual initiative, has been so conspicuous as to overshadow the other, the force of co-operative effort,—what Prince Kropotkin calls the force of mutual aid. At first sight it seems as if the history of the world were comprised in the history of a few great men.

When the world has worn for itself deep ruts of custom in manners, in government, in religion, in education, in philosophic thought, some man appears who startles the world out of its sleep and its dreams with a discovery or an invention or a theory and starts it off on a new course.

Every Columbus, every Gutenberg, every Bacon is a Prometheus bringing fire from heaven to lift men nearer to the gods.

And yet the plain men, the every-day men, the unendowed men, the undistinguished men working in the mass have wrought changes in the force of nature and in the structure of society. With the instinct which has led the ants and the bees to perfect their social condition by co-operative effort, pre-historic man in his mound building, his lake villages and in his pueblos showed how the common good might be promoted by common labor.

The great monastic institutions of the Middle Ages were centres of civilizing forces. By common work the monks cleared the forests, drained the swamps, planted vineyards and orchards, and made the wilderness blossom as the rose. They reared those buildings whose very ruins are beautiful and in them worshipped God by serving men. They fed the hungry, nursed the sick and taught the ignorant. Every abbey was a monument to the force of religious brotherhood.

The old English parishes and boroughs illustrate another type of communal effort. The people by common labor built the roads and the parish churches. The towns by the sea dredged their harbors and built jetties and breakwaters. The obligation to maintain the public peace rested equally upon all the people. Social life, too, was communal. On the parish green the whole parish participated in the games and shows which were provided by the common purse. The May dances, the Robin Hood games, the archery contests and the harvest festivals kept alive the civic sense and perpetuated it from generation to generation.

The history of every New England town illustrates the working of these two forces. By the foresight and courage of a few men, the material interests of the towns have been promoted. They projected all new enterprises. They were foremost in the churches, incorporators of the academies, served the town in the legislature, and in time of stress held the people to their duty by the example of their own sacrifices. These men were in the town and of the town, but they were not the town. That had an existence of its own and it maintained a spirited and healthy communal life. The people together built the roads and defences.

In raising bees, ploughing bees, and husking bees, in sewing and quilting bees, they illustrated the principle of *mutual aid*.

The old Boston vote: "It was generally agreed upon that our Brother Philemon Pormort should be entreated to become schoolmaster for the teaching and nurturing of children among us," in its quaint phraseology breathes the spirit of the closest *civic brotherhood*.

The early conditions were favorable to the development of these two forces. The wilderness of New England with its recesses all unexplored, its resources all undeveloped, was endlessly tempting to the venturesome, and stimulating to the keen-eyed and the enterprising. At the same time the hardships were so appalling and the risks so great as to develop prudence and poise. As the local opportunities by the seashore were exhausted, each generation found room to expand in a limitless interior. When the moving population had pushed its way to the remotest source of the New England streams and business enterprise seemed to lose its nerve for want of exercise, the manufacturing cities arose and tempted back from the country the disciplined descendants of the pioneers. They became captains of industry and finance where their ancestors had been only private.

While these circumstances tended to raise the personal factor to a high power, they also tended to quicken the social sense. Common sufferings and common dangers developed social sympathies, revealed social obligations and necessitated mutual aid. Every occasion for public expenditure was a subject of common knowledge. Not a dollar of public revenue was appropriated without deliberation and discussion.

Every offense against law and every lapse from virtue was also known and discussed in all its bearings, privately as well as publicly. All this tended to keep alive the civic sense.

The influence of the formal education in the schools was in the same direction. The schools kept but a few weeks in the year, and made no exacting demands upon the child's time. There were no age limits and no compulsion to secure regularity of attendance. The child was free to share in the activities of the family, of which he felt himself a co-operative member. The work of the school itself was so conducted as to develop a considerable degree of self-reliance. The opportunities of the schoolroom were like the opportunities of pioneer life. They appealed to the children of pluck. In getting their lessons, they found both incentive and reward. So the family and the school were co-operating agencies, but the school was subordinate and knew its place.

Are modern conditions wholly favorable to the development of the two forces which condition all social progress? It is no sign of pessimism to ask this question. Nor can it be answered by pointing to the unparalleled activities of the period. The demand for personal initiative is as urgent as ever. The rewards of success are greater than ever; but the demand is more exacting than in the past. The problems to be solved are more complex.

This is no less true in the realm of thought than in the realm of matter. Capabilities of a high order and superior training are demanded.

There must be penetration and grasp and alertness and patience. For impulse is not initiative. Is this



power being generated to such an extent that the supply is equal to the demand? Modern industrial conditions are not favorable to it, for initiative implies freedom, and the modern workman is not free. Industrial prosperity which is based on labor in which initiative has been atrophied for want of opportunity and which is unconscious of its own weakness, is only a sham prosperity, and has in it the seeds of its own decay.

Nor are the conditions wholly favorable to the awakening and quickening of civic sense. The civic unit has become too large to be thought of by an ordinary, untrained mind. Government by representation, too, inevitably tends to weaken civic ties. Men cease to be interested in public affairs when their contact with them is so remote.

The civic sense has also been deadened by the severity of the struggle for wealth. Competition has grown so fierce as to be absorbing. The maelstrom of so-called business, that is money-getting, tends to draw into its vortex the most intelligent and the most capable. No man can serve two masters and many men have ceased to be citizens and have become only business men.

As school people we are under obligation to ask what modern education is doing to generate the two forces which we have been discussing. The relation of the home to the school has been reversed. The last has become first. By a process as steady as the incoming of the tide, the school has come to absorb the time and energy of all children. By lengthening the school term, by compelling attendance, by steadily raising the age limit, by carrying children away from home to

distant schools, by extending the school curriculum and making it more elaborate, by adding the high school, by prohibiting child labor, the school has practically assumed the whole responsibility for the education of the young.

Is the modern school without the home doing for initiative, what the home with the old school did?

Is the child developing a civic sense in the isolation of the school which he developed in his intimate relation to the home and society?

I am not able to answer either of these two questions, positively, affirmatively. But there are few schools in which children are taught or allowed to go alone in their learning. The teacher goes before not merely to blaze a path but to build a boulevard. Many children are not only carried to school, but they are carried through school. Every lesson is developed in advance. Only the child is left undeveloped.

It is doubtful if the school is any more useful in awakening civic sense than in developing initiative. Civic sense is a late form of the general sense of social obligation.

It is rare to find in any school above the kindergarten any serious attempt to utilize the instinct of mutual aid. In the kindergarten the most severe reprimand that is used is to remind a child that he is not helping. But I have not been fortunate enough to have seen the principle applied among older children. From beginning to end the work is individual and the motives are individual.

It is from this standpoint that the isolation of the public school appears in the strongest light.

No one who thinks of the changes that have come

in public education during the last generation, can fail to see that with all the gains that have been made there have been some losses.

If we are wise, we shall not shut our eyes either to the gains or losses. If the gains are real and substantial, we want to keep them. If the losses are real, we ought to try to avoid them.

The practical question is: Can public education organize itself so as to develop the two great social forces, individual initiative and mutual aid? Some attempts are being made to do this. I have seen in a normal school, groups of students engaged in the mutual study of problems in psychology. I have seen in a primary school groups of children on their own initiative simulating the life of primitive peoples of whom they had read, providing by mutual labor shelter, clothing, implements and food.

I have seen grammar school children carrying on garden operations on the co-operative principle, and applying the same principle in their constructive work.

I have seen high school students conducting together analytical investigations in chemistry, constructive experiments in physics, and practical work in surveying.

I have seen in a school for orphaned boys, a city organization, with city officers, cottages built by the boys, owned in shares, the shares dealt in in the market, the property taxed and protected by the city officials, these officials being periodically elected by the whole body of citizens.

I have seen at Tuskegee an immense brick school edifice being built by the co-operative labor of students,—the building like the cathedrals of old, a monu-

ment to the brotherhood of labor, and to the individual initiative of Booker T. Washington.

When such cases cease to be sporadic and become general, we shall have extracted the fangs of the graded school.

But to make them general will be no easy task. To it must be brought the profoundest convictions, the most ardent enthusiasm, the most cordial and sympathetic co-operation, the most sagacious judgment and the most diligent and patient effort. To effect such a transformation of popular education would be a consummation worthy of the Twentieth Century and would be the supreme triumph of the two forces which have conditioned all social progress through the ages.

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### ARITHMETIC—A MISUSED AGENT IN EDUCATION.

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Arithmetic will always be, as it has always been, one of the fundamental, necessary, central subjects which must be first considered in education. It is quite the fashion to rail at arithmetic almost in terms of abuse, as though arithmetic were to blame for about all the unsatisfactory teaching in elementary grades. However, we need not be much troubled, this, too, will pass. I have put this word "misused" into my title for two reasons: First, because of this indiscriminating criticism, and secondly because it must be ad-

mitted that the subject has not always been so well and wisely used by teachers as to develop all its value. What I have to say may be arranged under four headings:—

I. *Present Status.* Just now there is a very encouraging condition of inquiry and criticism upon this subject. The place and the value of arithmetic are being studied and we have a right to look for very important advancement in the near future. I wish to protest against the extravagant importance that is given to the "explanation" in certain schools. Explanation is good, but a cast-iron form of explanation may operate to keep the child from ever understanding the conditions of the problem. The work with little children should deal with objects and with actual numbers. It is to be observed that the operation "five times two" or "five times three" includes the taking of a number of objects or a group of objects as a unit, and this is a much more difficult step than taking the single thing as the unit. In much of the primary work that is now being brought before us the early objective work is very clearly developed but the mind of the child is allowed to remain in that stage of purely objective thinking. The doctrine of the three stages of thought is not a new one, being as old as Plato, but it is one that ought to be known and that should guide the practice of every single teacher.

II. *The Ends to be Gained.* The results which we seek by arithmetic teaching are: First, useful knowledge, second, mental culture, third, moral uplift. We need a little elementary arithmetic for the affairs of common life, and arithmetic also is the gateway to all the higher sciences. Every carpenter and every other

mechanic is using principles of geometry all the while though he may not be aware of the fact. Arithmetic naturally leads the mind forward from the lowest stages of thinking to the higher. It is impossible for us to visualize large numbers; we must use the concept and work with the symbol, and the advancement by which the mind moves forward from the apprehension of a simple number of objects to the working of large problems by the means of the figures and then in successive higher stages to algebra, calculus, logarithm, etc., is almost an exact parallel of the general evolution by which the mind advances from the merest sensory idea to the highest reaches of which human thought is capable. The third end, which includes moral evolution, is the general end of all education, and if arithmetic had nothing to offer on that side of life then it would not be a fit subject for the curriculum. The first moral requirement is to know and to tell the truth and mathematical study induces exactness of apprehension and of statement. There is a very noble sentence in the preface to McLellan and Dewey's "Psychology of Number" which I like to think of:—

"As for the objection that number work is lacking in ethical substance and stimulus, much may be learned from the study of Greek civilization from the recognition of the part which Greek theory and practice assigned to the ideas of rhythm, of balance, of measure in moral and æsthetic culture. . . . Even upon its merely formal side a study which requires exactitude, continuity, patience, which automatically rejects all falsification of data, all slovenly manipulation, which sets up a controlling standard of balance

at every point can hardly be condemned as lacking in the ethical element."

III. *In What Grades to Teach.* In all grades; and yet the number study in the first grade should be very, very little, advancing slowly. We can do considerably advanced work with young children, but it is not necessary; and it is better to spend that time largely on language work. Problems should be used from the first, but they should be simple.

IV. *Matter and Method.* We need to insist upon accurate and thorough work. There is first the counting by ones, twos, threes, etc., forward and back, the learning of the tables of multiplication and division, not to recite verbally but so that they are actually known by the child; then there should be sufficient drill on the four processes of addition, subtraction, multiplication and division with whole numbers and fractions so that the work will be automatic. Every subject should be introduced first as mental work and the written work should come later. Practical application in measurements is of the highest importance.

But the most important thing to think of in teaching arithmetic in any grade is the attitude of both teacher and pupil; to seize every thought as a means of power, so that it shall be used to stride forward to something yet greater; everything that we teach should be as it were a door opened out to the world of truth; everything learned should be as a new light helping the pupil to see greater and brighter truths beyond and above.



## SUBJECTS AND ARTS IN SCHOOL.

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Since school education, for the individual or class, is the issue of conscious endeavor to train the child for and into the civic and industrial life he is to live, it follows that, in response to changing needs and interests, school practice must change from time to time. What subjects and arts shall have place in school work is always an open question. Each generation must decide for itself what is best. It is not a question whether we know better how to teach our children than all the wise men of the past. Upon adulthood of to-day is laid the responsibility of determining what kind of school education is best for the children of to-day. Tradition may instruct us but it must not enslave or even constrain us.

It is easy to lay down the principles that should guide in the selection of subjects and arts for elementary schools. We may readily agree with Mr. McMurray, in his notable address at Atlanta last February, that utility, capacity and interest are the main factors in determining what subjects shall be taught. But to determine what is useful in a broad sense and to measure the capacity and interest of pupils is the real task. This is the living problem.

In the life of man and nature are found all school subjects and in the child's endeavor to realize such life and thus to realize himself is the practice of school arts. Knowledge, science and art are the same inside

as outside the school room. The division of knowledge into departments and the finer classification of departments of knowledge into manifold subjects, though natural and useful, are more or less crude and forced. Furthermore, all knowledge is related and one subject may not wholly be separated from another. What subject is there that history or geography may not include? While close analysis and careful differentiation of subjects in mature study are essential, yet I believe that the elementary school has suffered by forcing upon young children the analytic methods of the mature mind. What else but this tendency has caused the multiplicity of subjects and the numberless periods in school programs? Formerly the child had spelling, reading, language and writing as distinct lessons. The trend of recent years toward a unification of subjects by teaching related truths from the child's point of view seems a reaction from false practice and an evidence of a better knowledge of the child mind and a better appreciation of child life. The whole universe is the child's first lesson as well as man's last. The truth and beauty of the world is forever knocking at the doors of his life for entrance. He, too, is constantly striving to make all his own. What the world of men and nature offer him and what he seeks are the true subjects of his study.

The subjects and arts that best meet the test of utility are those most closely related to the child's real life. What he sees, hears, touches becomes the object of his interest and attention. School education, governed too much by tradition and animated too little by the real industrial and social life of the people, is inclined to be concerned rather with traditional subject-matter

than with the life of the child and its needs. It too often tends to take the child out from his true and natural environment and to create about him an artificial world of unreal forms, unintelligible facts and arbitrary laws, which seem to have little real relation to his own real and onrushing life. This is tribute paid to tradition. To the child the life of school, of home, of play, of work and of God's out-of-door should be one and harmonious. When the doors of the school-room are open to the truth and beauty of nature and to the real life of men, the child is kept in sympathetic relation with the objects and events with which he lives.

The coming citizen should be trained to think the thought of his time, to grasp living problems, to be resourceful in the common circumstances of his life. The life of nature and of man constitute the actual and proper environment of the child, and are the natural, obvious and potent means and influences for his education in school and everywhere. Social and industrial needs long ago placed the three R's and other subjects in the curriculum. History was added for the child's knowledge of the past experience of the race; civics, for his realization of civic life; and nature study to place him in sympathy with his surroundings—with his own life. A greater appreciation of health has added hygiene, games and physical exercises. Music and drawing have come in to meet æsthetic wants, manual arts are fast securing a larger place, and the needs and interests of coming citizens, as revealed in the industrial life of the people, are likely to call for other arts and subjects.

When each community lived largely by itself and

was not tested by sharp competition of distant communities and its life was simple, the boy who could read, write and cipher a little stood a fair chance in life with his fellows. Now when all our country is joined by rail and wire, when commercial competition has become intense, when industrial operations require large training, and when life in all its phases has grown more complex and strenuous, the school boy needs a training that will fit him to take his place in the life of to-day and have a fair opportunity with his fellows. Whatever his calling is to be he is to act in a larger arena than his grandfather, have a harder contest, and need a stronger equipment and finer training of his powers. The school's larger work of to-day is due to increased public demands. Parents clamor for more industrial, commercial and technical training for their children, and perhaps then complain of crowded courses, increased work and the strenuous spirit of the schools. Even the blind public criticism of the school for the imperfect preparation of its graduates for work is essentially a call for new things and may be interpreted as new demands of the people.

Consequently, by common agreement, no subject may be wholly omitted from the present course of study. As Mr. McMurray has pointed out, relief must be sought in the elimination of matter from various subjects rather than of complete subjects. Already much that was formerly taught in arithmetic and grammar has been omitted. Relief may also be gained by better methods of presentation, by more attention to things that count and by better use of time.

It is significant that the later additions to courses of study have been school arts, such as manual training

and domestic art. The fact indicates that we are living the doctrine that expression is as important in education as impression. It accords with the public demand for better industrial training in school. The same trend may be observed in the changed treatment of subjects, as that of the English language, in which the art of composition is largely practised in place of the study of technical grammar. It may be safe to predict that further changes in courses of study will increase the practice of school arts at the expense of the study of formal subjects.

School arts, as drawing, writing and manual training, easily meet the test of utility, interest and capacity. Knowledge is of the experience of others, art is a real experience of the child. While subjects and arts cannot be wholly differentiated, yet to do things under guidance is the best and happiest way for a child to learn.

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### THE MEASURE OF A TEACHER'S EFFICIENCY.

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A teacher's efficiency or teaching power, like any other natural power, physical or spiritual, can be known and measured only by its effects.

The efficiency of a machine is measured by the amount of work it will do in a given time against a given amount of resistance.

The efficiency of a source of heat is measured by observing the rise in temperature of a given quantity

of water to which the heat is applied. The efficiency of a source of light is measured by counting the number of candles required to produce the same illumination.

These are physical powers, and it has been a leading task of physical science to devise methods and instruments of precision for the accurate measurement of their effects.

Teaching power, on the other hand, is a spiritual power, mind operating on mind; and mental science has not yet devised precise methods of measuring the effects of such operations. Quantitative expressions applied to teaching power must needs be metaphorical and vague not precise and literal.

We do indeed know that the resistance against which teaching power works is often very great; but we also know that it is variable, not constant and measurable like the force of gravitation. An idea may perhaps be conveyed by describing a man as "a thirty-three boy-power teacher;" but only vaguely to the minds of persons not acquainted with the boys.

Nor has intellectual brilliancy yet been measured by anything analogous to candle-power. It can only be estimated relatively in terms of more and less.

The rank lists of school and college purport to do this with a fineness of discrimination really unattainable and therefore unjustifiable. All that can be said safely is that the brighter intellects are registered in the upper and the duller ones in the lower part of the lists.

Notwithstanding the inexactness with which our estimates of teaching power or efficiency must be expressed, it is necessary that we make such estimates

both in our own case and in that of others, for this thing called efficiency is the very commodity which we are all buying or selling in the educational market.

Commercially speaking, we can easily feel the difference between a degree of efficiency worth \$1000 a year and a degree worth \$3000; but the difference between five hundred and five hundred and fifty dollars' worth of the same commodity is not so palpable.

So, in a rough approximate way, we do estimate, for purposes of employment, the value of teachers' services; and the chief factor in such estimates is or ought to be efficiency. It is therefore worth while to note some leading elements of personal character and attainment which indicate efficiency.

First in importance is the power of control. It is the power of holding the attention of numbers of persons through given periods of time for the purpose of instruction. It secures obedience, good order, and industry through interest in the business of the school. It is the attribute of a commanding personality in the teacher—easily recognizable when present and when absent leaving the would be teacher in a sad plight.

This power of control is a native inborn faculty bestowed on men in different degrees, and on some not at all.

Doubtless this natural faculty, when present, can be strengthened and improved by exercise; it can be guided by better and better judgment, with more and more experience; but the utter lack of it cannot be made good by any array of other estimable traits of character. Lack of control is fatal to efficiency. There are many most excellent men and women who cannot keep school. They were not born for it. Some have



tried it and discovered their lack. It is fortunate when this discovery is made early in life.

The unfortunate and troublesome cases arise, not from an utter lack of the power of control, but from the possession of only just enough of it to escape decisive failure.

There are assistant teachers whose feeble power of control must needs be reinforced by the authority of the principal or by the help of the other teachers. They are in continual need of such support and are apt to complain if they do not get it. Such assistant teachers, who do not assist but require to be assisted, are a drawback on the efficiency of the school as a whole, and they ought not to be retained long in service.

Unhappily, however, in cities or towns where permanency of tenure is established by law or custom, such teachers are apt to be carried along from year to year to the slow but sure detriment of the schools. Their places ought to be taken by more efficient teachers; but the difficulties in the way of making the necessary changes, as experienced superintendents too well know, are often quite insurmountable.

It may here be asked whether these remarks apply to the case of beginners. For certainly the beginner is not infrequently deficient in the power of control, and for a time may justly expect the support of the principal and other teachers. If such support can save the young teacher from lasting failure, it should unquestionably be given. Especially effective can such support be made where the difficulty arises not so much from a deficiency in the native power of control as from bad judgment in the use of what power

there is. In such cases the support of more experienced teachers will best take the form of kindly criticism, advice, and suggestion.

Apparently every large city school system must be worked under the ever present necessity of training an adequate number of beginners each year to keep the teaching force fully recruited. Hence it is a wise policy to provide that young teachers shall not be discarded immediately upon the failure of their first attempts at teaching, but shall be permitted to repeat their trials under changed conditions and expert advice until it becomes clear whether or not they possess power of control enough to reach ultimate success.

But it is surely not a wise policy to continue such trials too long. No duties of the principal and of the superintendent are more important than these: (1) to support and advise young teachers in their early efforts to govern their classes so long as there is a fair prospect of success, but (2) to procure their discharge when a reasonable probation has resulted in failure.

The mere fact that a teacher has control of his pupils, taken by itself alone, is not enough to decide the whole question of efficiency. Control argues efficiency, it is true, but it throws no light on the kind of efficiency that may be at work in particular cases. For such light we must examine and estimate the motives which have led the pupils to submit to such control as exists.

It may be a control due to fear of punishment or to hope of material rewards. Better this than no control at all; but the motives thus brought into play have not a high moral value.

The best kind of efficiency is displayed by the teach-

er who skilfully plays upon the whole range of children's higher motives, and so produces harmonies of action which the inefficient teacher harping unskilfully upon one or two of the lower motives can never evoke.

The popularity of a teacher is often held to be a measure of his efficiency, especially by those who can form only inexpert judgments. Popularity is such a dominant factor in politics that the force of it is apt to be felt in the educational field. And it may be admitted that a teacher popular with his pupils is usually so because he is possessed of amiable characteristics, and that such a teacher can do more and better with his pupils than can an unpopular teacher.

But popularity as a measure of efficiency should be used with careful discrimination. There is a superficial popularity of the kind sometimes tested by voting contests carried on by the newspapers. And there is an unwholesome popularity which is sometimes obtained by weak concessions to the whims of pupils, or by compliance with their desire to escape work, or by some form of coddling. Such a popularity does not argue efficiency.

Perhaps the most commonly used measure of a teacher's efficiency is the result obtained by examination of the teacher's pupils.

In the first place the teacher himself may be the examiner. By being the examiner, he can learn something of the merits and defects of his own methods of teaching, that is, can measure his own efficiency. All good teachers turn examiners from time to time in order to test their own work and incidentally to discover defects in their teaching. These they will remedy without, necessarily, disclosing them to another per-

son. Next, the principal of the school may be the examiner. His purpose may not be to test the efficiency of each individual teacher so much as to determine the fitness of the several classes for promotion or to regulate the course of work in each teacher's room according to the plan prescribed in the course of study.

Going a long step further away from the teacher, we find the examiner to be the Superintendent of Schools. His examinations should be and are usually of the regulative kind, although the results of them may be used in the promotion of pupils. But they do not determine the relative efficiency of the teachers. Gross inefficiency is discovered in this way, but not the slightly differing grades of efficiency.

Still further away from the teacher are examinations held outside the school system altogether. Such, for example, are the examinations for admission to college.

It is not unusual to find teachers of preparatory schools counting the number of passes and of failures among their pupils in the college examinations for the purpose of estimating their own teaching power. This is a perfectly natural and right thing to do under the circumstances; but it is a mistake to make success of pupils in passing college entrance examinations the sole criterion of the teacher's efficiency. A far better criterion is found in the success with which these same pupils pursue their college studies after admission.

Time fails us for a full notice of many interesting characteristics which make for a teacher's efficiency. We must pass over such matters as his scholarship, his joy in learning and equal joy in teaching, his knowledge of the principles and methods of education,

his moral earnestness, his justice, his clemency, his firmness clothed in gentleness, his courtesy, his sympathy with the young and familiarity with their thoughts and ways, and last but not least his physical health. All these are inviting topics, but the final word shall be reserved for the crowning one of all, the distinguishing characteristic of all great teachers, the power of inspiration. This power of inspiration is the highest power; it transfuses and vitalizes all other powers; it kindles in pupils intellectual enthusiasm, moral enthusiasm, or both; it leads pupils to lay part hold on the higher purposes of education; and so it is the power whereby the teacher makes permanent impression on his pupils' characters.

It is power of inspiration that has made Thomas Arnold of Rugby remembered, and Louis Agassiz of Cambridge, and Mark Hopkins of Williams College, and Francis Wayland of Brown University. Your memories will extend the list.

It is this power of inspiration that has distinguished in greater or less degree all good teachers. In looking back over the course of our lives we all can remember some teacher who first awakened our interest in some department of knowledge or set our heart upon some worthy purpose, and so influenced the subsequent course of our lives. This is our conscious recognition of our teacher's power of inspiration. What this same power may have wrought in us unconsciously to ourselves we cannot directly know. That this effect may have been great we are prepared to admit by what we observe in others. Do we not sometimes recognize the past pupils of a great teacher by a certain stamp they wear in mind or character which came from him?

All teachers should desire to possess the power of inspiration and to possess it abundantly. For by this power, chiefly, is measured their efficiency; and by this power is determined the ultimate value of their work. All good teachers possess this power in greater or less degree. It is this that makes them good teachers. All good teachers seek to increase this power by keeping their minds ever open to the sources of inspiration. All good teachers know that work without inspiration is drudgery, profitless alike to teacher and pupil. Loss of inspiration means failure in the higher purposes of education.

If there were to be revealed to the oncoming host of young teachers in the land, as there was revealed to the Roman army under the first Christian emperor, a sign from heaven by which to conquer—*hoc signo vinces*—we might well expect that the sign would be this one word—*inspiration*.

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### ECONOMY IN EDUCATION.

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Contrary to the popular impression the immediate concern to-day in all enterprise and invention, certainly in all productive agencies, is economy in the use of power. This is the ostensible reason for the vast concentration of capital which has been going on for the past decade. It explains equally the present tendencies in invention. Nearly all inventions repre-

sent savings in the application of physical power. It is everywhere felt that prodigious as are the powers of nature there is a limit even here. Her resources are not inexhaustible. The rate of present use throughout the industrial world forbids extravagance or waste. We are coming to see that we must learn to make some very great economies through radical inventions, or be shut up to economies of the old time restrictive sort.

I am persuaded that the time has come for more attention to the principle of economy on the part of all who are concerned with education. The material sources of educational supply are far from being unlimited, and while the intellectual sources are illimitable, there may be an unpardonable waste in the use of these.

Let me revert for the moment to the material sources of educational supply. There are but two sources, the State and individuals able and willing to endow schools. The State gives through taxation, and in the laying of taxes the State is obliged to take account of many objects which are claiming support with increasing urgency, like the care of the insane, the feeble minded, the hopelessly poor, and the criminal of varying degree.

Turning to the private givers let us not be dazzled by a few magnificent gifts of the past decade to education. The great givers are as a rule men of the first generation, men who make the name of the family, whose inventive or productive skill has led straight to fortune. These are usually persons of simple and inexpensive tastes and habits. Their social expenditures are small because their social wants are small.



Men of the second and third generations of fortune are not as a rule large givers to public uses of any kind. They maintain establishments, build country seats, play with yachts and automobiles, and in general spend money to satisfy social ambition rather than to further educational interests.

I do not care, however, to pursue this phase of my subject further. I have said this much in order that I may get a hearing for my subject in its broader educational aspects. The educational capital of any community, as of any country, consists of three things.

First, in the amount of knowledge which is available, or which can be made available for the purposes of instruction.

Second, in the amount of money which is available, or which can be made available for the maintenance of schools.

Third, in the amount of time which is available or which can be made available for attendance at school.

There can be no wise and economical use of educational capital without the full recognition of each of these three sources, and without the constant effort to bring them into the closest working relation with one another. You may have a well ordered supply of knowledge, and the abundant means of distributing it, furnish the proper means of distribution. You may have costly means of distribution running to waste for want of a well ordered supply of knowledge. And worst of all you may have the well ordered supply of knowledge, and the abundant means of distributing it, and both may be relatively useless, for the want in any community of any corresponding sense of the value of knowledge, for the want of the true hunger

and thirst after it, for want of the patience which can alone secure it, for want of the denial and sacrifice of lower and incidental things which are always to be found in competition with it. Or, to put the last point more definitely, I suspect that in many communities it is far easier to raise money for the sufficient maintenance of schools than it is to ensure the time of scholars against the inroads of social life, against the premature allurements of business, or against the growing spirit of impatience with hard and protracted intellectual work. The great danger to economy in the use of educational capital lies, as you will see, in the difficulty of bringing all three parts of it together, and using them to mutual advantage. But there is special danger of waste at each of three sources to which I have referred.

Let us begin with the waste which is going on in the use of that knowledge which forms so large a part of our educational capital. We are now happily free from the great waste which came from the withholding of knowledge, whether it was withheld out of fear for the truth or from distrust of the human mind. Of course the chief illustration of this wasteful economy was to be found in the handling of religious knowledge, but it was practiced in the handling of all knowledge. Many of us can remember how closely the principle was applied in the administration of libraries. I do not know of any better characterization of this old time economy than Mark Twain has given in the aphorism which he puts into the mouth of Puddenhew Wilson, "Truth is precious, let us be saving of it."

We are also in the process of outgrowing that waste which comes from so many misfits in the use of knowl-

edge. It is no new fact that men do not think alike, but it is a new discovery that they cannot be made to think alike. The acknowledgment of this fact, the fact that there is a possible and desirable variety in the mind itself is the basis of modern education. Certainly it is the basis of the whole elective system. No one can tell what would have happened if the new subject matter of education, all that lies within the range of modern science, had found only a stereotyped mind to deal with. What did actually happen was the uprising of a new order or type of mind to meet the new knowledge.

We may also fairly say that we have averted a vast deal of waste through changes in the methods of teaching. Doubtless every change is attended with a certain waste, especially if there is a long stage of experimentation. But the net result of the changes in method has been an actual saving of time to both teacher and scholar, the vivifying and stimulating of each alike, and a general quickening of the educational pace.

The present waste in the use of knowledge for the purposes of instruction is due chiefly to the overwhelming amount of knowledge. We have not yet learned how to organize the mass of material at hand so that we can distribute it with a wise economy. I think that the demand just now is not so much for the teacher as for the organizer, the man who can bring simplicity and order out of this confusing abundance. At present we have hardly more than the option of giving a student fragmentary and unrelated subjects of study, or of guiding him by some narrow lane through the wide territory of knowledge. We are in

a constant dilemma between thoroughness and breadth, with the danger of reaching variety in the place of breadth, and monotony in place of thoroughness. The difficulty admits of no easy solution. It is not enough to say to an inquiring mind, "you cannot go amiss," or "take what you like best," or "fix your object in life and make a straight line toward it." No one of these courses means education. Education, when once it passes beyond the stage of mental discipline, means some true appreciation of the known and knowable world. It means intellectual citizenship in the world.

I pass from the question of economy in the use of educational material to the question of economy in the use of educational property. Any great city is an object lesson pointing to the increased value of the educational plant of the Country. The significant fact is the ratio of increase in the value of the plant to that of the cost of teaching. Boston expends, as I understand, about \$2,000,000 annually for teaching. The city is expending at the rate of \$1,000,000 annually for the increase of its educational plant. The increase of expenditure for school houses is far more than the increase of expenditure for teaching. This is an example of what is taking place everywhere. The endowed educational institutions of the country are fast becoming great corporations, not only on account of the value of their invested funds, but also on account of the value of their local property. This vast increase in the value of the educational plant is sure to raise its own question of economy. For considerations affecting the teacher or the scholar the school time is limited to so many hours in the day, so many days in the week, and so many weeks in the

year. It is not the habit of a business plant to fall into idleness for from one-fourth to one-third of every year. I know of no analogy in this limited use of educational property, except in the use of ecclesiastical property. And here it must be remembered that there is a great difference between the Roman Catholic and the Protestant Churches. The former show far more economy than the latter. At this particular point it is the Roman Catholic who is the modern, and the Protestant who is the mediævalist.

The vast increase in the value of our educational plants, public and private, is sure, as I have said, to raise its own question of economy. The Summer School, organized in some Colleges into the curriculum, is a protest against the present situation. The protest takes other forms. In one way or another we are becoming concerned about the larger and continuous use of the property invested in education. The use required of the property of the public school will vary according to the needs of the various communities. In some communities the teaching force will be increased so that the work done in the buildings can be duplicated or diversified. The buildings will be used more hours in the day and more weeks in the year. In other communities, I have no doubt that the high school will be made to satisfy all those educational needs for which local provision can be made. The courses of instruction will be widened, advanced courses will be introduced especially in the sciences, and in some cases one or two years will be formally added to the high school curriculum.

You naturally ask me, as representing the college, what effect this extension of local high school will have

upon the colleges. My answer is that here and there a man will be by this means diverted from a college course: but that in all probability where one man is thus diverted two will be sent to college in his place. This is the law of educational increase. Any large development of the local educational spirit creates wants which reach beyond the local supply. I do not fear from the point of view of the college, any extension of the high schools to meet to the full local demands. The colleges will reap the ultimate benefit.

Of the three sources of educational capital—knowledge, money, time—the last is by far the most precious, for it represents the human element. It covers that hunger and thirst after knowledge of which I have spoken, the noble ambition to win the high rewards of life by sufficient means, the patience which endures, the courage which overcomes obstacles, and the joy of intellectual discipline. These are the terms in which educational time is to be measured, not days and weeks and years. And it is the proportion in which this element enters into the general capital which determines the profit of the whole business. If this is lacking in any community the profit is small. If it is large the profit is great.

A generation ago, perhaps I had better say, two generations ago, New England was dotted with small academies, whose only riches consisted in the quality of life which they drew to them from their limited areas. The knowledge at their command was scant, though genuine, equipment was practically wanting, and yet the educational profit from these schools was enormous. They filled our colleges with men who straightway took possession of the high places of



Church and State. I know of no way except through such an illustration in which I can impress upon your minds the relative value of time as a part of the educational capital. And yet it is by far the most difficult part to secure and to preserve. There is more waste in the use of it than in the use of knowledge or of property.

What is a true and proper economy in the use of time? Let us answer the question from the point of view of the average family. I do not reckon in this answer the family of extreme poverty, or the family which for any reason is dependent upon the earliest available earning power of children. From the point of view of the average family I should say that, measured by the test of economy, the education of a boy ought to be carried to some reasonable conclusion. It ought not to be left a fragment. Education as a whole can never be finished, but certain parts of it can be so far completed as to be of service. For lack of completion they are comparatively useless. One begins a modern foreign language. The beginning carries with it a certain amount of discipline but if the study is dropped before a reading or speaking knowledge of the language is secured the waste is apparent. One may begin a course of Mathematics, and gain another kind of discipline, but no result is secured until the foundation is well laid upon which one may build in Physics or Engineering. A like continuance, till a definite end is reached, gives value to a science, or to any subject which calls for results. It is uneconomical to the last degree to stop short of an available end.

Further than this I should answer that the truest



economy in education fixes an end which measures the full capacity of the boy. It is uneconomical, we shall all agree, for a man to work below his powers, even though this reduced service is necessitated by the failure to train his powers. Economy requires service at full capacity in a man as in a machine. True, it may not be possible to determine in advance just what one's capacity is, but wherever there is promise of the development of personal power of any sort through education, the opportunity for development ought to be seized upon. We have no such surplus of personal power of a high order as to allow any to run to waste.

I have dwelt in some detail upon this final aspect of my subject, because I am sure that the educational capital which is represented in time is at once the most precious part and the part most likely to be abridged and reduced.

The most wasteful result of modern education is the vast and increasing amount of arrested education.

The number falling by the way is too large to be explained by proper reasons—like want of health, or poverty, or mental unfitness for applied courses. These reasons do not explain the great differences between the numbers entering our High Schools and the numbers graduating from them. They do not explain the great differences in the numbers entering our colleges and the numbers graduating from them. The loss here is at least twenty-five per cent., and I think that it is increasing rather than lessening. My impression is, without facts enough, however, at hand to warrant an opinion, that the loss is considerably greater in the men's colleges than in women's col-

leges, where the reasons which I have given as proper reasons ought to hold good in larger degree. It is a matter of careful inquiry at present where the reason or fault lies—in the home, in the fitting school, or in the college.

The study of economy in the use of educational capital seems to me to be the essential to further educational progress. We need to study, as men are studying everywhere, the ratio of cost to efficiency.

The end is not cheapness. That is a term for which our generation has a proper contempt. We are not careful about cost, if cost bears the right relation to efficiency. The public school system is passing under the test. The higher education in all its departments, technical schools, college, professional school, university, is passing under the test. We have been living for the past twenty-five years, especially for the past decade, in an educational epoch. We, who stand for education, have had the ear of the public. The public has been responsive to our appeals, patient with our experimentation, and generous, in furnishing the means for educational expansion. We cannot expect to hold this relative position indefinitely. Other subjects and other interests will claim the public mind.

Let us justify in every legitimate way our claims to a permanent place in the assured respect and satisfaction of the people. And to this end, let us learn how to get the very best results of knowledge, money, and time, in mental character and power. Our problem is the same with that of men all about us, whatever may be the material in which the work of men lies, namely, the true ratio of cost to efficiency, and in our case the problem is the same whether the final expression of efficiency is culture, or practical power.

## REPORT OF PROCEEDINGS DURING N. E. A. CONVENTION, BOSTON, 1903.

At the annual meeting of the Board of Councillors of the American Institute of Instruction held January, 1903, it was voted to pass the meeting of 1903 and remit the dues for the current year. The present board of officers was by unanimous vote directed to hold itself responsible for the meeting and program of 1904, and to invite all our members to aid in the support of the Boston meeting of the National Educational Association. This meeting promised to be the largest and, in many ways, the most important and interesting educational gathering ever held in the world.

It seemed especially fitting that the American Institute of Instruction, the oldest educational association in America, and now the distinctively New England body, should take an active part in welcoming and entertaining the National Educational Association, now the greatest educational association of the country.

To this end the whole first floor of the Rogers Building of the Massachusetts Institute of Technology was secured for our social and business headquarters. The library and adjoining rooms were accepted as headquarters by the National Educational Association directors of the six New England states. The location could not have been more central, being within five minutes' walk of all National Educational Association meeting places. The headquarters of over thirty states were within the same range.

There were maintained during the entire week a competent Information Bureau, free stenographic, typewriting and messenger service, telephone and telegraph communication, correspondence room and rest room.

The National Educational Association directors from the N. E. states had desks here, and teachers desiring to do so had their mail sent to Rogers Building. A register of New England teachers, with their city and home addresses was opened on Saturday, July 4th, and maintained throughout the week, thus enabling all New England teachers and their friends readily to find each other.

Receptions were held in the Library every afternoon in charge of ladies and gentlemen representing social and educational organizations from each of the New England states.

The several apartments of the building besides being equipped for the various uses above indicated, were made very attractive by numerous works of art from the studio of Caproni and by trees and plants from the conservatory of MacMulkin.

Throughout the week there were always in attendance committees of ladies and gentlemen (representatives of local educational associations) to welcome and make at home the thousands of visitors.

On Monday, July 6th, at five o'clock P. M., a banquet was given at Hotel Vendome by the Institute to the officers and directors of the N. E. A.

Between two and three hundred participated. There were seated at the head table: Pres. Charles H. Keyes, Pres. Charles W. Eliot, U. S. Com. Wm. T. Harris, Gov. John L. Bates, Mayor Patrick A. Col-

lins, Sec. Wm. C. Crawford, Sec. Irwin Shepard, Treas. Alvin F. Pease, Treas. Charles C. Davidson, Dr. Edward Everett Hale, Hon. George H. Martin, Pres. Grafton D. Cushing, Supt. Edwin P. Seaver, Pres. Nicholas M. Butler, Pres. Wm. R. Harper, Pres. Henry S. Pritchett, Supt. A. G. Lane, Supt. N. C. Dougherty. Addresses were made by Gov. Bates, Mayor Collins, Pres. Eliot and Commissioner Harris.

The occasion was a very delightful one, long to be remembered as having brought to the same board a large number of the most distinguished educators of the country.

At the close the company went to the Mechanics Building to attend the opening exercises of the Convention.

Early in the year the Local Executive Committee of the N. E. A. asked the American Institute to take charge of the Advance Memberships of the Boston meeting. To this end the president, secretary and treasurer of the Institute served as chairman, secretary and treasurer respectively of the Advance Membership Committee associating with themselves Messrs. Walter S. Parker and John Tetlow of Boston, Mr. George I. Aldrich of Brookline, Mr. Ray Green Huling of Cambridge, and Mr. Charles T. C. Whitcomb of Somerville. The secretary was also appointed as the local representative of Sec. Irwin Shepard (N. E. A.) in financial matters pertaining to this work.

The Committee succeeded in securing over 7000 advance members thereby turning into the permanent fund of the N. E. A. over \$14,000.

Quite a number of membership certificates were

lost or left at home. As these were necessary to the owners for securing badges, guide books and many convention privileges, an office for dispensing duplicate certificates (without charge) was maintained at Institute headquarters until all demands upon it had been met.

Acknowledgments are here made to the Library Bureau Co. for furnishing an outfit of ingenious cabinets for card catalogue and correspondence, whereby the work of the office was greatly facilitated. The company also provided a competent clerk for arranging the thousands of letters and cards for ready reference.

Further acknowledgments are hereby made to the members of the Local Executive Committee of the N. E. A. for their hearty co-operation with the officers of the Institute in carrying forward various lines of work of common interest; to the Massachusetts Institute of Technology for the use of the Rogers Building and for other courtesies extended through Sec. H. W. Tyler and Burser F. H. Rand; to the Hospitality Committee of the N. E. A. for its co-operation in equipping and maintaining Institute Headquarters; (this work was under the special direction of Mrs. Ella L. Cabot); to the Paine Furniture Co. for use of furniture; to Mr. P. Caproni for art decorations; to Mr. Edward MacMulkin for floral decorations; to the Sub-Masters' Club of Boston and to other local educational organizations for valuable committee work.

The officers and members of the American Institute of Instruction desire to express their gratification at having had the privilege of doing their part, by ways

of hospitality and financial aid, in making the Boston meeting of the N. E. A. one of the largest and most successful of national conventions.

WILLIAM C. CRAWFORD,  
Secretary.